Phibro-Tech, Inc.
Santa Fe Springs, California

Final Site Conceptual Model

March 9, 2005

Prepared for:

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The information contained in the document *Final Site Conceptual Model* for the Phibro-Tech, Inc. facility in Santa Fe Springs, California, dated March 9, 2005 has received appropriate technical review and approval. The conclusions and recommendations presented represent professional judgments and are based upon findings from the investigations and sampling identified in the report and the interpretation of such data based on our experience and background. This acknowledgement is made in lieu of all warranties, either expressed or implied. This document was prepared under the supervision of a California Registered Geologist.

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Introduction

This document summarizes pertinent information regarding historical and current operations and investigations performed at the Phibro-Tech, Inc. (PTI) facility located in Santa Fe Springs, California. Environmental assessment activities were performed at the facility in the late-1980s, and in the early-1990s a RCRA Facility Investigation (RFI) was performed in two separate phases. Groundwater monitoring was first performed at the Site in 1985. Quarterly groundwater monitoring is currently on-going and has been performed since 1986 on primarily a quarterly basis. The development of the Site Conceptual Model (SCM) presented in this document was requested by the California Department of Toxic Substances Control (DTSC). The intended use of the SCM is as a basis of reference for evaluating and selecting an appropriate remedial approach for the vadose zone and affected aquifers underlying the PTI facility. The following subsections discuss location, climate, etc., and activities and operations at the subject site and nearby facilities. Nearby water supply wells are also discussed in this section.

1.1 Location

The Phibro-Tech, Inc. (PTI) facility (Site) is located at 8851 Dice Road in Santa Fe Springs, Los Angeles County, California. It is situated on approximately 4.8 acres in an industrialized section of the city. Surrounding PTI directly to the north, west and east are other industrial complexes. Directly south of PTI are a set of railroad tracks, with additional industrial facilities south of the railroad tracks. The nearest residential neighborhood is approximately 1000 feet to the north. Site location is illustrated on Figure 1-1. Figures and tables are provided at the rear of each section where they are first discussed, with historical figures and tables provided in the appendices.

1.2 Regional Setting

The Site is located in the Santa Fe Springs Plain within the Coastal Plain of Los Angeles County, a slightly rolling plain that dips northeast towards the City of Whittier. The facility itself is located on fairly flat land that slopes from northeast to southwest. Elevations at the Site range from approximately 148 to 154 feet above mean sea level (MSL) (CDM; May 1992).

The Site is located along the northeastern margin of the Central Block of the Los Angeles Basin, and on the Santa Fe Springs Alluvial Plain. The Whittier Fault zone, a prominent regional structure, is located approximately three miles northeast. This fault zone comprises the northern boundary of the Central Block (USGS, 1965).

1.3 Climate

Climate in the vicinity of the facility is characterized as semi-arid. Mean temperature is 62 degrees Fahrenheit (°F), and recorded extremes in nearby areas range between 18°F and 116°F. Average rainfall is 13 to 14 inches per year, occurring primarily between December and April (Clayton, 2002). The greatest amounts of precipitation occur during winter months in the form of rain, with little or no precipitation occurring during the summer months (CDM, May 1992). As indicated on Figure 4 (Appendix G), higher than normal precipitation occurred during the mid-1990s. The wind direction is predominately from the southwest (Clayton, 2002).

1.4 Site History and Historical Operations

Records indicate that the earliest use of the land was as a railroad switching station owned by Pacific Electric Railway Company. From the late 1940s to the early 1950s, a foundry casting facility operated on the property. Pacific Western Chemical Company occupied the site from 1957 to 1960. On December 24, 1959, Pacific Western Chemical Company changed its name to Southern California Chemical (SCC). In 1984, CP Chemicals, Inc. purchased the SCC facility and property. In 1994, the company changed its name to Phibro-Tech, Inc. (PTI). PTI is a New York Corporation headquartered in Fort Lee, New Jersey.

PTI operates under hazardous waste facility RCRA permit 91-3-TS-002, and receives various hazardous aqueous wastes and recyclable materials, mostly from the electronics and aerospace industries. PTI treats these substances to create usable new products that are sold. Examples of these products include plating solutions, brighteners, and conditioners. These solutions typically contain copper, iron, ammonium fluoride, tin, lead, chromium, nickel, heavy metals, sulfates, chlorides and hydroxides.

In 1988, USEPA performed an aerial photographic analysis of the Site spanning a 44 year period (1945 through 1988). The analysis noted that in 1945 the area was occupied by a small power generating facility and bulk oil storage tanks. In 1953, the power facility was gone and a small unidentified industry was noted in the southeast corner of the Site. In 1959, the active chemical facility was first noted. Throughout the approximately 30 year period following 1959, the analysis noted a variety of process areas, horizontal and vertical tanks, drums storage, staining, a spoil pile, and unlined and lined containment ponds. The 1988 photograph indicated that several impoundments in the Copper Cement Pond Area had been filled in, two settling basins were storage tank containment structures, and the number of 55-gallon drums in uncontained storage was approximately 4,700 The analysis noted that the facility continued to present a neat and clean appearance, indicating good housekeeping practices were in use at the Site.

The Current Conditions Report (CCR; CDM, 1990) provides additional information on historical activities at the Site. Figures 6 and 7 from the CCR illustrate the locations of Hazardous and Solid Waste Treatment Storage and Disposal pre-November 19, 1980 and post-November 19, 1980, respectively. The figures also include a listing of products, tank numbers, and capacities for the various waste management units present pre- and post-November 19, 1980. Figure 8 illustrates the locations of approximate historical discharge locations. Copies of Figures 6, 7, and 8 from the CCR are included in Appendix E.

According to the CCR, information on facility manufacturing processes prior to 1971 is relatively scarce. Pacific Western Chemical applied for a waste disposal permit for a ferric chloride manufacturing process in 1957 and for chrome-bearing wastes in 1959. In 1961, operations reportedly included copper recovery, chrome recovery, zinc solution manufacturing and several other processes. In 1971, facility operations included a zinc sulfate process, and ferric chloride, alkaline and solder etchant manufacturing. As of 1977, operations reportedly included the same processes as 1971, although in different areas, with the addition of a copper leaching area and caustic etchant processes. In 1984, processes included the manufacture of a patented ammonia etchant, and copper oxide, ferric chloride, copper sulfate, and chromic acid solutions from a variety of spent etchant and acid solutions.

1.5 Present Operations

The facility currently employs a variety of operational processes such as reactors, settling tanks, holding tanks, wastewater treatment tanks, filter presses, multi-stage clarifiers, process and storm drain sumps, drum storage areas, and washing areas. Certain waste products are conveyed to the sewer, under a permit with the Los Angeles County Sanitation District. Waste sludge is transported to off-site recycling facilities and/or permitted disposal facilities.

According to the Hazardous Waste Facility Closure Plan (Clayton, June 2002), the facility is entirely paved or covered with coated or uncoated concrete except for the railroad tracks. Currently, portable drip pans are utilized to contain possible incidental leaks during transfer of product from the rail cars. Waste management units at the facility currently consist of storage tanks, treatment tanks, container storage areas, tank truck loading/unloading area, railcar loading/unloading area, and a wastewater treatment area. The waste streams that the facility receives and manages for storage and/or treatment are listed in Table CP-1 of the Closure Plan (Clayton, 2002). Table CP-3 lists the waste management units and maximum inventory, and Figure 2 illustrates the current facility layout. Copies of the tables and figure are provided in Appendix A.

As indicated on Table CP-3 and Figure 2, there are seven operational areas at the facility: the "C" area, the "S" area, the "F" area, the "J" area, the "W" area, and two container storage areas (ERS #1 and ERS #2). Facility processes are briefly described below.

"C" Area - Copper Chloride and Copper Ammonium Chloride Processing

Spent cupric chloride etchants, alkaline copper etchants, and alkaline copper strip etchants are brought by truck and containers to PTI. The wastes are pumped into separate waste storage tanks. From there, the wastes are pumped into reactor vessels for chemical treatment, heating and agitation. The copper oxide produced is decanted and washed to meet product specifications. Decant and wastewater are treated in the on-site wastewater treatment facility. Ammonia evolved during the process is scrubbed with hydrochloric acid to produce raw material for fresh etchant.

"S" Area - Copper Sulfate Processing

Spent copper sulfate plating and etching solutions are transported to PTI by tank truck or in containers. The wastes are temporarily stored and then treated in reactor tanks by the addition of sulfuric acid, copper oxide, copper sulfate crystals, and other appropriate agents as needed. The resultant solution is agitated and pumped into storage tanks through a filtration system and sold as product copper sulfate solution.

"F" Area - Ferric Chloride Processing

Spent ferric chloride arrives on site by either tank truck or in containers. This waste material is stored in hazardous waste storage tanks. The spent material contains copper and other trace heavy metals. Approximately 3,000 gallons are pumped into a reactor vessel which contains iron. As the spent material circulates over the iron, copper and other heavy metals precipitate and the iron is dissolved. Ferrous chloride is produced by this process. It may then be sold or chlorinated to produce ferric chloride. Precipitated heavy metals are sold to smelters.

"J" Area - Various Inorganics Processing

Various inorganic metal-bearing wastes are processed in this area by chemical precipitation. In most cases the precipitating agent is sodium hydroxide, sodium carbonate, or other alkaline material. The resulting solids are filter pressed and packaged for sale.

"W" Area - Wastewater Treatment Area

A wastewater treatment facility began operating on the site in the 1960s. There is incomplete information on the system prior to 1975. Presently, process wastewaters, drum and truck wash water and routine plant clean-up wastes are discharged to four treatment tanks. The system provides batch treatment using sodium sulfide for precipitation. Precipitate is removed using a plate and frame press and sold to smelters. The filtrate discharges to two final effluent holding tanks whose contents are analyzed for compliance with permit parameters before batch discharge to the Los Angeles County Sanitation District.

ERS Areas - Hazardous Waste Container Storage

PTI maintains two hazardous waste container storage areas where containers are stored prior to treatment or being shipped off-site to a designated facility. Containers may be stored longer than 10 days prior to being transported to another facility. Hazardous materials are shipped off-site by flatbed trailers, bulk trailers, and railroad cars to designated recovery or treatment facilities.

1.6 Excavations, Underground Utilities, Unpaved Areas, Pond 1, and Miscellaneous Disturbed Areas

There are several known areas at the facility where shallow (i.e., to depths of 10 to 15 feet or less) native soils have been disturbed (e.g., excavated, tilled, etc.) as a result of historical operational activities. These known excavated or disturbed areas are discussed below as they potentially may affect transport (both horizontal or vertical) of contaminants in the subsurface. Historical unpaved areas are also included in the following discussion as these areas may affect contaminant transport in the subsurface.

1.6.1 Excavations

Historical excavations have been performed in the following areas: former fuel USTs area, former chromic acid UST area, and former zinc pond area. The discussion below summarizes what is known about these three areas.

Former Fuel USTs Area

As described in the CCR, two 10,000 gallon underground storage tanks (USTs) were removed from the facility in July 1989. The tanks stored gasoline and diesel fuel, respectively, and were located just west of the drum cleaning area. Following completion of the RFI, the approximately 12 to 15 feet deep excavation was reportedly backfilled with clean fill dirt and the surface paved.

Former Chromic Acid UST Area

A fiberglass 3,000-gallon UST (WMU12) installed to a depth of 8 feet bgs was removed from the site in approximately 1981. The UST formerly contained a low pH chrome etching solution which was a mixture of chrome, copper, chloride, ammonia, nitrogen, and sulfate (Kleinfelder, 1986). Information on the vertical extent of the excavation and backfilling is not available. Given the depth and size of the UST, the maximum depth of the excavation was likely on the order of 10 to 12 feet.

Former Zinc Pond Area

The CCR indicated that an unpaved area in the northern portion of the Site was used for zinc storage, with a bermed area containing three storage tanks or ponds (see Figure 6, Appendix E). Neutralization sludges were also reportedly deposited in a depression in the area. In 1976, 720 cubic yards of material were removed from this area and disposed at a Class 1 landfill. Information is not available in PTI or regulatory agency files regarding the dimensions of the excavation. Based on review of the 1976 aerial photo contained in Appendix B, the area appears to be oval-shaped and approximately 80 feet long (in an east to west direction) by 30 feet wide (in a north to south direction). Therefore, based on the volume of material removed, the depth of the excavation has been estimated at approximately 8 feet.

1.6.2 Underground Utilities

The majority of facility utilities now and in the past have been above ground. However, there are four areas where underground utilities have been noted: a sewer line in the northeastern portion of the Site, Pipeline Sumps by the Bag House, Street Sumps by the drum and equipment cleaning area, and a storm drain by the guard shack. Available information regarding these four features is provided below.

Sewer Line

A sewer line, likely installed when the auxiliary trailer was placed in service between 1972 and 1983, is located in the eastern portion of the facility. As illustrated on Plate 1, the sewer line trends in a general north-south direction in the area between the auxiliary trailer and the guard house. The sewer line, which is no longer in use, is not believed to be a conduit for preferential transport of contaminants as it is located in a paved roadway and is not located in active process or chemical storage areas.

Street Sumps

A dual sump identified on Plate 1 as the Street Sump is located adjacent to the main roadway, in the vicinity of the drum and equipment cleaning area. The capacity of each sump is approximately 360 gallons, and the two sumps are connected with a double-wall fiberglass reinforced plastic drain pipe. The sumps are active and drain stormwater from the paved roadway during storm events. Stormwater accumulating in the sumps is routed via overhead piping to the 130,000 gallon capacity stormwater storage pond (T-3).

All active sumps are inspected annually as described in detail in the Corrective Action Site Cover Operation, Maintenance, and Inspection Plan (PTI, 2002).

Pipeline Sumps

A dual sump identified on Plate 1 as the Pipeline Sump is located adjacent to the main roadway, in the vicinity of the Bag House. They are connected by an underground conduit approximately 12 inches below grade. These sumps were not intended to collect liquids, but were entrance points for an above ground natural gas line and two above ground water lines which crossed under the roadway at the point. The sumps each hold approximately 5 gallons. In early 2003, the underground portions of the natural gas and water pipes were removed and both sumps were filled with concrete.

Storm Drain

Two 4-inch diameter metal pipes approximately 12 inches below grade direct stormwater from the Schnee-Morehead property located adjacent to the northeastern portion of the Site. Both pipes trend in a north-south direction under the roadway by the Site's gated front entrance. After exiting the pipelines, stormwater derived from Schnee-Morehead then flows over the paved surface towards the drainage ditch. The curbing, wall, and berm along the eastern portion of the Site prevent stormwater flow derived from Schnee-Morehead from entering active process or chemical storage areas on Site.

1.6.3 Unpaved Areas

The CCR indicated that most of the Site was paved except for the area east of the laboratory and west of the ferric chloride area. The CCR noted that this area had been paved since 1973, until the paving was partially removed in December 1988. The road dividing the Site was constructed in 1975, and other areas of the Site were reportedly paved in 1980.

As indicated by review of historical aerial photographs (see Appendix B), during the early years of operation the Site was primarily unpaved, with paving added over the years as the facility was improved and expanded. Large-scale photos from 1983 and 1988 contained in a photographic analysis performed by USEPA in 1988 (USEPA, 1988) indicated that the majority of the eastern portion of the facility appeared paved, with the southwestern portion appearing primarily unpaved.

During the RFI, unpaved areas were noted at the following locations: the facility railroad spur along the southern boundary of the Site, area east of the laboratory, and area west of the ferric chloride area. The areas east of the laboratory and west of the ferric chloride area were both paved in September 2001. PTI also implemented several improvements to the overall facility cover and curbing in 2001 and 2002, as detailed in the Corrective Action Containment Systems Report (PTI, 2003) (see Appendix H).

As indicated in the report, the entire regulated portion of the facility (with the exception of the rail spur) is currently covered by asphalt or concrete. Additional information regarding the formerly unpaved area west of the ferric chloride area is provided in the following section.

1.6.4 Ferric Chloride Rehabilitation Area

In August 1987, SCC signed a Consent Decree with the Department of Health Services agreeing to minimize the possibility of hazardous waste releases by repairing and/or replacing several tanks and containment areas. During the implementation of the RFI in the early 1990s, employee interviews indicated that the top 8 feet of the unpaved area west of the ferric chloride area had been excavated or tilled, and stabilized with lime during the late 1980s. A white material assumed to be lime was noted in several borings advanced in the area during the RFI, and in one boring (FeCl-SB1) at a depth of 10 feet. Therefore, a maximum disturbed depth of 8 to 10 feet has been assumed for the area.

The reported purpose of the lime mixing was to reduce the mobility of metals in soils prior to construction of the proposed Ferric Chloride Rehabilitation Area. The proposed area was not developed.

1.6.5 Pond 1 and Other Potentially Disturbed Areas

The shallow soils in the vicinity of Pond 1 were noticeably different in character compared to the shallow soils observed throughout the majority of the Site. Observations are discussed in detail below. Review of boring logs (see Appendix D) also indicated several areas where shallow soils may have been disturbed.

Pond 1 Area

With the exception of borings PI-6 and PI-7 and monitoring well MW-4, the fine-grained silts and clays observed at the majority of other Site locations were absent in the Pond 1 area (shallow soil samples were not collected from boring PI-2). The RFI report theorized that the fine-grained silts and clays were removed and replaced with more appropriate compactable materials (e.g., sands) prior to construction of Pond 1. Borings PI-6 and PI-7 were located in the roadway, and well MW-4 was located adjacent to the roadway. It would likely not have been necessary to excavate these areas for the construction of Pond 1.

The number of blow counts required to drive the sampler were recorded on the RFI boring logs. The number of blows generally gives some indication of the density of the material being sampled. Review of the blow counts for borings advanced within and adjacent to Pond 1 indicated that the counts were not as high nor as consistent as one would expect, had the soil been prepared prior to construction of the pond. The blow counts, therefore, do not confirm or refute the theory that the soils were removed and replaced. It is also possible that the absence of surficial fine-grained materials in the vicinity of Pond 1 represents a localized area within the Bellflower aquitard where coarse-grained sediments were deposited.

Other Potentially Disturbed Areas

Review of boring logs indicated the presence of foundry sands and/or slag in shallow soils underlying the Site. These materials were noted at a large number of sampled locations north of the facility east-west road. Coarser-grained materials (possibly fill) were also observed in shallow soils at several locations. Plate 1 illustrates the locations where foundry sand/slag/fill/coarse-grained materials were noted, with additional discussion provided in Section 2.1 of this document.

According to the CCR, a copper cement drying pond area (WMU46) consisting of six ponds (ponds 1, 2, 4, 5, 6, and 7) were used for drying copper cement product from the 1960s to the 1980s. According to the workplan, the ponds were constructed with either concrete or a mat material covered with asphalt and a sealant. The general area was investigated during the RFI (see boring WMU46 and SB-8 locations on Plate 1). Coarse-grained materials and foundry sand/slag were noted at two locations in the area, WMU46-D and WMU46-E, respectively. Based on review of the boring logs, it does not appear that these areas were excavated.

1.7 On-Site Extraction Well

Prior to 1985, an extraction well (EX-1) was installed near Pond 1 to remove contaminated groundwater. Because construction details for the well were not available, a video was conducted in the interior of the well in September 1990. The video indicated that the well consists of 6-inch diameter PVC and that the screened interval is 56 to 71 feet. Total depth is 71 feet; thus, the well is screened in the upper Hollydale aquifer. A nominal amount of sediment was observed near the bottom of the well. The screen appeared to be free of foreign materials and undamaged. The pump, which was removed, was previously set at about 70 feet below ground surface (bgs).

The well is completed at the surface within a protective steel standpipe, and the area surrounding the well is paved. It is not known whether a grout seal was placed in the annulus of the well during construction. However, standard practice now and in the past has been to grout surface casings in place. Because the screen length is relatively short (15 feet), the well is screened entirely within the upper Hollydale aquifer, and the well is protected at the surface by the standpipe and surface paving, the threat of cross-contamination at this location is believed to be minimized. However, this well will be formally plugged and abandoned in accordance with LACDHS standards if no extraction and treatment of groundwater is required for Corrective Action.

The extraction well was reportedly active for approximately six months between 1985 and 1987. It was reported that the well was typically activated approximately every other day long enough to pump between 5,000 and 10,000 gallons per day. An estimated one million gallons were pumped in all. Pumped water was conveyed to the reactors to be used in processing. Extraction was discontinued when it was realized that contamination from an off-site source was being drawn onto the PTI site (CDM, 1991).

A four-hour step test was conducted in February 1991 to determine an appropriate discharge rate for a future constant-discharge aquifer test. During the test, water levels were measured in both the pumping well and nearby MW-4. Discharge rates were 19.9, 29.5, 40.4, and 58.7 gallons per minute (gpm). The long-term discharge test was conducted in March 1991. The average pumping rate was 49.7 gpm and the pumping duration was 31 hours. Water levels fully recovered in about two hours (CDM, 1991).

1.8 Surrounding Area

The area surrounding PTI has historically been used for industrial purposes. As a result of these activities, several facilities in the vicinity have contributed to what is considered a regional groundwater contamination problem. Regional groundwater constituents of concern consist primarily of chlorinated and aromatic organic compounds.

Copies of aerial photos for the years 1928, 1938, 1947, 1952, 1968, 1976, 1989, and 1994 are provided in Appendix B. The air photos for 1928, 1938 and 1947 show large bulk oil above ground storage tanks surrounding the Site. In the 1952 photo, the bulk oil tanks have been removed. In the 1968 and subsequent air photos, the surrounding area is highly industrialized.

In the late 1950s, industrial warehouses were developed north of PTI. The adjoining property to the north was operated by Witco Products for the manufacture of chemicals. The Witco property is currently vacant. The property to the east, across Dice Road, was undeveloped until 1959. Air Liquide (Liquid Air Inc.) has operated this property since 1983. The adjoining property to the south of PTI consists of a Union Pacific railroad right-of-way.

The Pilot Chemical Company of California (Pilot) is located at 11770 and 11756 Burke Street, and is listed as a RCRA small quantity generator site. This facility is located approximately 0.1 miles north of and up- to crossgradient from PTI with respect to the groundwater flow direction. The primary purpose of this facility is to manufacture detergents.

Review of historical USEPA aerial photographs from the 1950s to 1960s indicated surface staining migrating from the current Pilot facility area to the northwest corner of the property adjacent and to the north of PTI (USEPA, 1988). The nature of this historical spill was not indicated in the USEPA report.

In 1988, five underground storage tanks (USTs) were removed from the Pilot facility. These USTs contained toluene, xylenes, and caustic materials. A soil assessment conducted during excavation and removal activities indicated that these substances were present in soils at the bottom of each excavation. Analyses of these soil samples indicated concentrations of toluene, ethylbenzene, and xylenes (TEX) of up to 12,000 parts-per-million (ppm). Elevated soil TEX concentrations were found in samples collected below the groundwater level. Also, four monitoring wells were installed downgradient of the former USTs. Analyses of groundwater samples from these wells indicated that highest concentrations of TEX were 110,000 parts-per-billion (ppb), 14,000 ppb, and 52,000 ppb, respectively (McLaren Hart, 1994).

According to McLaren Hart (1997), the Pilot facility groundwater currently contains detectable concentrations of volatile organic compounds (VOCs) including carbon tetrachloride, chloroform, 1,2-dichloroethane (1,2-DCA), trichloroethene (TCE), tetrachloroethene (PCE), 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), benzene, ethylbenzene, xylenes (collectively BTEX), and diesel range organics (TPH-diesel). pH conditions are generally near neutral. BTEX concentrations are especially elevated downgradient from the numerous above-ground storage tanks (ASTs) that are present at Pilot. Concentrations of BTEX exceeded 100,000 ug/L in wells immediately downgradient of the ASTs (McLaren Hart, 1991).

Public records databases were searched to determine if enforcement actions had been taken against the Pilot facility. According to the RCRA-SQG, CERCLIS/NFRAP, LUST, UST, ERNS and Spills databases, the Pilot Chemical Company is not classified as a significant non-complier and is not subject to corrective action. However, two ERNS listings were identified for a 400-pound spill of sulfur dioxide in 1991 and a 1,500-gallon dodecylbenzenesulfonic acid spill in 1993.

Techni Braze, Inc. (TBI) is located 0.2 miles north-northeast and up- to crossgradient from the subject property with respect to the direction of groundwater flow. This facility is listed on the SCL, Spills, and RCRA-SQG public-records databases. TBI conducts alloy brazing and heat treatment of metal parts using numerous induction furnaces. The facility has operated since 1966. According to the SCL database, the soil and groundwater have been impacted by VOCs (primarily PCE). Depth to groundwater was indicated to be approximately 32 feet below ground surface (bgs). The database also reported that the Los Angeles Regional Water Quality Control Board is acting as the lead agency for the site.

In 1991, a release of PCE was discovered at TBI. This release affected groundwater (concentrations up to 14,000 ug/L) and soil (up to 92,000 ug/kg), and likely migrated off-site (Smith-Emery, 1995). PCE had been used as a solvent degreaser on site (Mabbet, Cappaccio and Assoc., 1991a). A soil vapor survey followed, indicating correspondingly significant PCE concentrations. PCE was detected in all of the soil vapor sampling locations, with concentrations ranging between 0.02 ppm to 1,080 ppm. Highest concentrations were found near a former parts degreaser area, and an existing aboveground PCE storage tank (Mabbet, Cappaccio and Assoc., 1991b). In 1995, a site investigation was conducted inside the building and along the perimeter of the property (Terra Vac, 1995). Results of this study confirmed the AST as a source of soil and groundwater PCE contamination, and also indicated that PCE contamination has migrated off-site in the downgradient direction.

Due to the highly industrialized nature of the Santa Fe Springs area, it is likely that there are other sites in the area, both known and unknown, with soil and groundwater contamination.

1.9 Production Well Survey

A survey of water supply wells within a three-mile radius of the Site was initially performed during the RFI (refer to Section 4.5.1 and Figure 4-3 of the RFI Report for a discussion of the results of the survey). The survey indicated that there were no active production wells within one mile downgradient of PTI.

A production well survey was performed again in 2003 during the preparation of this SCM, in order to obtain more recent information on nearby production wells and evaluate possible impacts to the wells with respect to the PTI site. The initial step in performing the 2003 survey consisted of contacting Water Replenishment District (WRD) staff to perform a search of the WRD database for water supply wells within a three-mile radius of the PTI facility. Upon completion of the search, WRD staff provided a location map illustrating the locations of all wells within a three-mile radius of the site, in addition to three summary tables. One summary table listed well information (well owner, well number, well status). The second summary table listed monthly pumping data from each well for the period from January 2001 to May 2003. The third summary table listed analytical sampling results for the wells, where available. The information provided by WRD for active drinking water supply wells was generally complete, due to sampling and reporting requirements placed on water purveyors. WRD records for inactive wells and irrigation wells was generally incomplete, and obtaining the missing information required numerous phone calls and letters to well owners/operators, with limited success.

The production well location map provided by WRD is provided in Appendix C. The current discussion focuses on wells located immediately upgradient of the PTI facility, and all wells located within a three-mile radius downgradient of the facility. Given a direction of groundwater flow consistently towards the southwest, all wells within the southwest quadrant of the WRD location map (with PTI as the center), were included in the current evaluation. A summary of well owner, well number, monthly average production, well type, well status, and well construction details (where known), for one upgradient well and 15 downgradient wells is provided in Table 1-1. A summary of VOCs and metals analytical results for groundwater samples collected from the wells, where available, is provided in Table 1-2.

1.9.1 City of Santa Fe Springs

The City of Santa Fe Springs has three wells of interest to the study, one a short distance upgradient and two downgradient from the Site. City staff provided recent water quality results, well construction and operation, and well driller's reports for all three wells. The three wells are discussed below. With well locations illustrated according to WRD number on the radius map in Appendix C.

City of Santa Fe Springs Well No. 1 (WRD Well No. 200022, and also know as 30-R3) is located approximately 1,000 feet north (upgradient) from the center of the PTI facility. This well has a screened interval of 200 to 900 feet bgs, pumps approximately 1,500 gpm, and is screened primarily in sand and gravel. According to City of Santa Fe Springs Department of Public Works personnel, the well is active and water quality is generally good. Analytical results for a sample collected from the well in June 2003 are provided in Appendix C. Methylene chloride (MC) and trichloroethylene (TCE) were detected in the sample at concentrations of 0.81 and 1.40 micrograms per liter (ug/l), respectively. Both concentrations were below their MCLs of 5 ug/l. No other VOCs were detected in the sample. Of the 17 metals analyzed (arsenic, cadmium, chromium, copper, lead, nickel and zinc were included in the analysis), only one metal (selenium at a concentration of 5.0 ug/l) was detected. Based on WRD production records, Well No. 1 is the highest producer of the 16 wells discussed in this section, producing an average 137.83 to 160.77 acre-feet per month during the past few years.

The nearest active downgradient water supply wells are Well No. 4 (WRD Well No. 200235) and Well No. 309 (WRD Well No. 200279). According to City staff, Well No. 4 is a standby well and perforations shallower than 600 feet bgs were sealed in 1991. Analytical results from September 2002 indicate that VOCs, cadmium, chromium, and copper were not detected in the well. Pumping records indicate minimal use of the well during the prior few years.

Well No. 309 is inactive and the pump and motor have been removed from the well. City staff are planning to backfill and abandon the well. Analytical results were not provided in the WRD database for the last few years, indicating that the well is no longer in use. Pumping records also indicate the well has not been pumped for the past few years.

1.9.2 Mutual Water Owners Association of Los Nietos

According to the RFI report, a well (2S/11W-30Q5) operated by the Mutual Water Owners Association of Los Nietos was located on the west side of Norwalk Boulevard, approximately 1,250 feet northwest and crossgradient from PTI. This well is 370 feet deep, and the top of the screened interval starts at 152 feet bgs and extends to an unknown depth. The well was installed in 1951 and served about 96 homes. County Health Department directives dating back to the early 1990's indicated that water from this well was not intended to be used for drinking or cooking due to detections of VOCs in excess of MCLs. Attempts to verify the operation of this well in mid-2003 were unsuccessful. The well was also not included on the WRD location map or listings. The phone number for the association is no longer in service and the association is not listed in the telephone directory. Based on the age of the well, small service area, shallow completion, detection of VOCs exceeding MCLs, and restricted use, it is likely that the well is no longer in service.

1.9.3 Rocky Mountain Water Company

Rocky Mountain Water Company staff were contacted and provided well construction information and analytical results for the year 2003 for their active well (WRD Well No. 200234). As shown on the map in Appendix C, the well is located more than one mile from the Site, and is the closest active downgradient well. As shown on Table 1-1, the monthly average production ranged from 2.15 to 3.98 acre-feet during the past few years. Total chromium was detected at a concentration of 0.0020 mg/l in a sample collected in January 2003. With the exception of a concentration of 1.3 ug/l TCE, VOCs were not detected in the sample. According to the well owner, the 2003 results were typical for prior years. As shown on Table 1-1, the well is perforated in the interval from 300 to 500 feet bgs.

1.9.4 City of Pico Rivera

Well No. 8 operated by the City of Pico Rivera (WRD Well No. 200134) is located approximately 1.5 miles downgradient from the Site. As indicated on Table 1-1, monthly average production during the past few years was minimal, and ranged from 0.1 to 0.07 acre-feet per month. A concentration of 3.1 ug/l PCE was detected in the well during June 2002. According to City Water Quality Specialist Angel Quintero, there have been no water quality exceedences in this well during the past 10 to 12 years.

1.9.5 City of Downey

Two downgradient municipal water supply wells are operated by the City of Downey, approximately 2.5 to 3 miles southwest of PTI. Well 10 (WRD Well No. 200132) is located at 10100 Haledon Avenue, a short distance northeast of the intersection of Lakewood Boulevard and Florence Avenue. The well was drilled in 1952, is 650 feet deep, and is perforated between 380 and 403, 455 and 463, and 600 and 619 feet bgs.

Well 12 (WRD Well No. 200282) is located at 10221 Lesterford Avenue (just south of Florence Avenue and west of the San Gabriel River). The well was drilled in 1950, is 444 feet deep, and is perforated between 301 and 305, and 316 and 352 feet bgs. The pumping rate for Well 10 is 1,400 gallons per minute (gpm) and the pumping rate for Well 12 is 1,800 gpm. According to City staff, the City has a total of 21 wells and does not need to operate all wells at all times. Therefore, pumping from individual wells varies seasonally and yearly, depending on demand.

With the exception of low levels of bromoform and total trihalomethanes (TTHMs), VOCs were not detected in water quality results collected from the two Downey wells in 2002 and 2003. Total chromium, hexavalent chromium, and copper were also not detected in the samples. The analytical reports for the water quality samples collected from Wells 10 and 12 are provided in Appendix C. Lithologic and well construction information for both wells provided by City staff are also provided in Appendix C.

1.9.6 Southern California Water Company

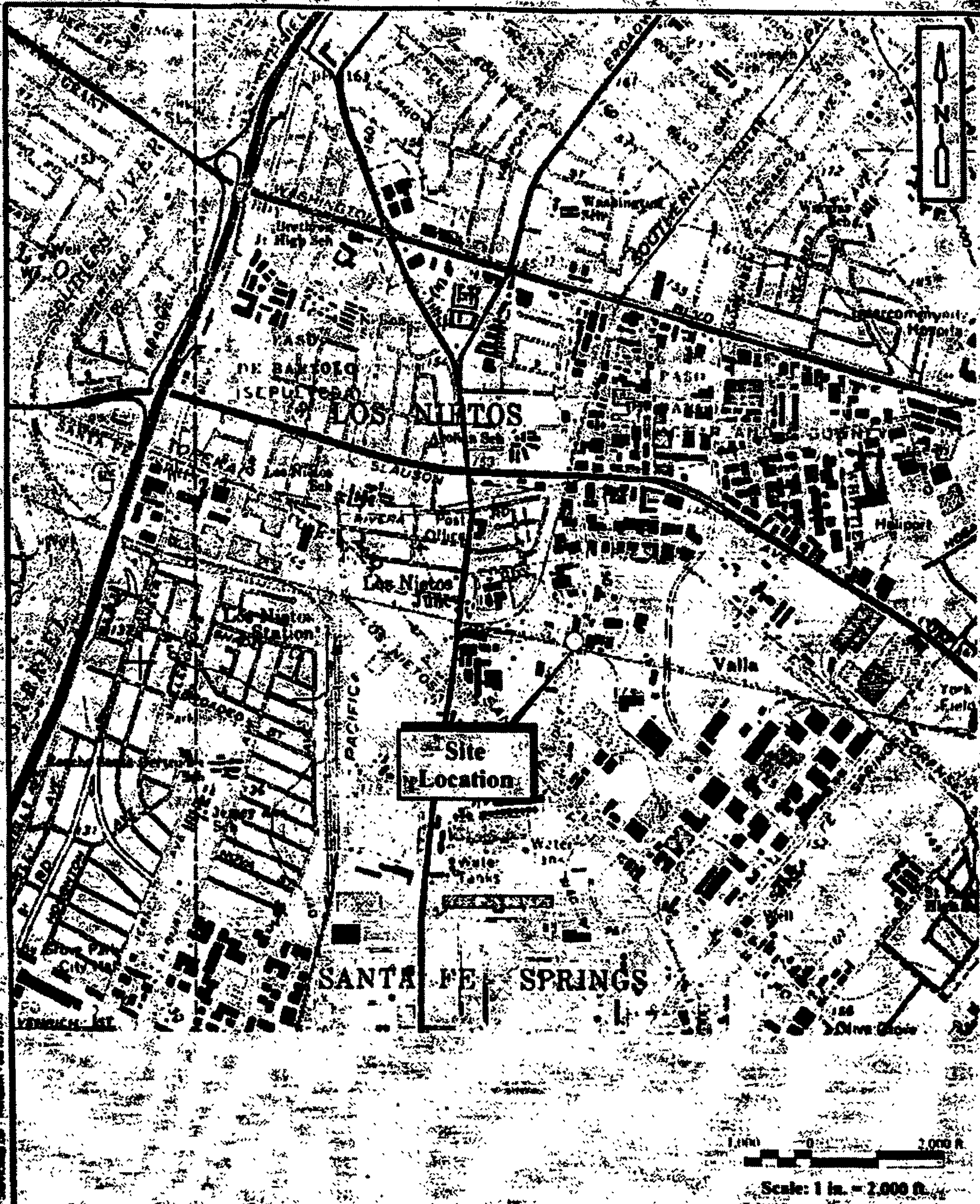
Southern California Water Company (SCWC) operates three wells approximately 2.5 to 3 miles downgradient from the Site. According to WRD information, two wells (WRD Well Nos. 200245 and 200319) are inactive and the third well (WRD Well No. 200284) is active. The active well is reportedly perforated in the intervals from 193 to 198, 277 to 279, and 336 to 364 feet bgs. Monthly average production ranged from 38.04 to 48.83 acre-feet during the past few years. According to water quality information provided by WRD for February 2002, VOCs and hexavalent chromium were not detected. Water quality information was not available for review for the two inactive wells. Based on review of WRD production records, WRD Well No. 200245 was apparently taken out of service in 2001, with WRD Well No. 200319 taken out of service prior to 2001. LA County Department of Public Works staff provided lithologic logs and well construction information for all three SCWC wells (see Appendix C).

1.9.7 Irrigation and Other Wells

Several small capacity irrigation wells are also listed on Tables 1-1 and 1-2. Water quality information was not available for these wells. Little Lake Cemetery

(WRD Well No. 200238) and Paradise Memorial Park (WRD Well No. 200281) operate two active irrigation wells. Julian and Helen Hathaway (WRD Well No. 200239) intermittently operate a private irrigation well. No information could be obtained from Whittier Union High School staff regarding their inactive irrigation well (WRD Well No. 200280).

Southern California Edison (SCE) Company staff were contacted regarding two wells (WRD Nos. 200315 and 200316) reportedly operated by SCE. SCE staff reported that they do not have any wells in the area. According to WRD production records, monthly average pumping from WRD Well No. 200315 during the past few years ranged from 0.16 to 2.10 acre-feet. With the exception of the well location shown on the WRD map, WRD did not have any additional information on WRD Well No. 200316.



8851 Dice Road
Santa Fe Springs, CA

Site Vicinity Map

CDM

Figure 1-1

TABLE 1-1

Summary of Production Well Information

WRD ID	State Well ID	LADPW ID	OWNER	Well Type	Status	Well Construction Details	Monthly Average Volume Pumped (Acre Feet) [1] 2001	2002	2003	Comments
200022	2S/11W-30R03S		Santa Fe Springs, City of	Production	Active	Perf: 200 - 900 feet bgs	157.05	160.77	137.83	City Well 1. Q=1,567 gpm
200132	2S/12W-35P01S	1565A	Downey, City of	Production	Active	TD=650, Perf: 380-403; 455-463; 600-619 feet bgs	35.81	59.36	69.15	City Well 10, Q = 1,400 gpm
200134	2S/12W-36M06S	1604AB	Pico Rivera, City of	Production	Active	TD=626, Perf: 277-290; 565-584 feet bgs	0.10	0.07	0.10	City Well 6, backup well, Q = 500 gpm
200234	3S/11W-06C03S		Rocky Mountain Water	Production	Active	TD=540, Perf: 300 - 500 feet bgs	2.15	3.98	3.91	
200235	3S/11W-06D03S		Santa Fe Springs, City of	Production	Standby	TD=600. Current Perf: 620 - 760 feet bgs	0.03	0.01	0.02	City Well 4. perfs. <600 feet bgs sealed 1991. Q = 1,200 gpm
200238	3S/11W-06N01S	1626X	Little Lake Cemetery District	Irrigation	Active	TD=650 feet bgs	0.66	1.25	0.17	
200239	3S/11W-06N02S		Julian and Helen Hathaway	Irrigation	Active	Per owner, TD is approximately 300 - 350 feet bgs	0.12	0.14	0.04	Per owner, well was installed before 1938
200245	3S/11W-07E02S	1617N	Southern California Water Company	Production	Inactive	TD=565, Perf: 196-206; 460-472 feet bgs	49.10	0.00	0.00	
200279	3S/12W-01F08S	1606L	Santa Fe Springs, City of	Production	Inactive	TD=1062, Perf: 870-890; 930-1000 feet bgs	0.00	0.00	0.00	City Well 309, pump removed, well will be backfilled.
200280	3S/12W-01G08S		Whittier Union High School District	Irrigation	Inactive	•	0.00	0.00	0.00	Owner's rep. stated they do not have a well
200281	3S/12W-01K09S		Paradise Memorial Park	Irrigation	Active	•	0.08	0.08	0.08	Per owner, well is approximately 100 years old
200282	3S/12W-02H04S	1596H	Downey, City of	Production	Active	TD=444, Perf: 301-305; 316-352 feet bgs	2.32	7.09	10.80	City Well 12, Q = 1,800 gpm
200284	3S/12W-02R01S	1606U	Southern California Water Company	Production	Active	Perf: 193-198; 277-279; 336-364 feet bgs	46.83	38.04	46.55	
200315	3S/12W-11A06S		Southern California Edison Co.	•	Active	•	1.06	2.10	0.16	Owner's rep. stated they have no wells in the area
200316	•		Southern California Edison Co.	•	•	•	•	•	•	Owner's rep. stated they have no wells in the area
200319	3S/12W-12A02S	1617K	Southern California Water Company	Production	Inactive	TD=262; Perf: 194-218 feet bgs	0.00	0.00	0.00	

• = information not available from well owner/owner's rep., WRD, or LADWP

WRD = Water Replenishment District

TD = total depth — Q = pumping rate

Perf = well perforations — gpm = gallons per minute

[1] - Monthly average for 2001, 2002, and January through May 2003

TABLE 1-2
Summary of Production Well Analytical Results

WRD ID	OWNER	Date Sampled	Well Type/Status	VOC Detections	Metals Detections
200022	Santa Fe Springs, City of	June-03	Production/Active	0.81 ug/l MC, 1.40 ug/l TCE,	ND cadmium, chromium and copper
200132	Downey, City of	February-03 (metals) & August-02 (VOCs)	Production/Active	1.2 ug/l bromoform, 1.2 ug/l TTHMs	ND cadmium, total chromium and hexavalent chromium
200134	Pico Rivera, City of	June-02	Production/Active	3.1 ug/l PCE [1]	-
200234	Rocky Mountain Industries, Inc.	January-03	Production/Active	1.3 ug/l PCE, 1.1 ug/l TCE	ND cadmium , 0.0020 mg/l chromium, and ND copper
200235	Santa Fe Springs, City of	September-02	Production/Standby	All VOCs ND	ND cadmium, chromium and copper
200238	Little Lake Cemetery District	-	Irrigation/Active	-	-
200239	Julian and Helen Hathaway	-	Irrigation/Active	-	-
200245	Southern California Water Company	-	Production/Inactive	-	-
200279	Santa Fe Springs, City of	-	Production/Inactive	-	-
200280	Whittier Union High School District	-	Irrigation/Inactive	-	-
200281	Paradise Memorial Park	-	Irrigation/Active	-	-
200282	Downey, City of	August-02 (VOCs) & Oct-2002 (Hex. Cr) & May-02 (Cu)	Production/Active	0.82 ug/l bromoform, 0.82 ug/l TTHM	ND copper, total chromium and hexavalent chromium
200284	Southern California Water Company	February-02	Production/Active	All VOCs ND	ND hexavalent chromium
200315	Southern California Edison Co.	-	- / Active	-	-
200316	Southern California Edison Co.	-	-	-	-
200319	Southern California Water Company	-	Production/Inactive	-	-

- = information not available

WRD = Water Replenishment District

TTHM = total trihalomethanes

[1] = per City Water Quality Specialist Angel Quintero, there have been no water quality exceedences in the well during the past 10 to 12 years.

Section 2
Geology and Hydrogeology

The Site is underlain by a series of Pleistocene alluvial aquifers separated by aquitards composed of fine-grained sediments. The three uppermost aquifers (Gage, Hollydale, and Jefferson) are of particular interest to the SCM. The Bellflower aquiclude and the Gage aquifer are part of the Lakewood Formation, and the Hollydale and Jefferson aquifers (and separating aquitards) are part of the San Pedro Formation (DWR, 1961). Based on Site boring logs (Appendix D), these stratigraphic units generally appear to be continuous and relatively horizontal in the area underlying the PTI site. An east-west cross section illustrating the regional hydrogeology for the area and a fence diagram utilizing Site boring and well logs were provided in the RFI report (Figures 2-1 and Figure 2-2) and are included in Appendix E of this document. Detailed discussions of regional and local geology and hydrogeology were provided in Sections 2.2 and 2.3, respectively, of the RFI Report. Pertinent information from the RFI Report is summarized below.

2.1 Surficial and Shallow Materials

Native surficial materials at the Site are classified as the Bellflower aquiclude (DWR, 1961). Based on evaluation of Site boring logs, the Bellflower aquiclude is approximately 10 to 15 feet thick and consists primarily of clays, silts, silty clays, and sandy clays. Due to the presence of localized coarser-grained sediments (e.g., silt with fine sand at well MW-5, sand at boring PI-5, and silty sand at well MW-1D) within this interval, the uppermost unit underlying the Site will hereinafter be referred to as the Bellflower aquitard. Plate 1 indicates the locations of areas at the Site where coarser-grained materials or fill were indicated on Site boring logs. As shown on the Plate, the majority of these areas were located in the northwestern portion of the Site.

As previously discussed in Section 1.6.5, the shallow soils in the vicinity of Pond 1 were noticeably different in character compared to the shallow soils observed throughout the majority of the facility. With the exception of borings PI-6 and PI-7 and monitoring well MW-4, the fine-grained silts and clays observed at the majority of other locations were absent.

The presence of a black slag-like deposit was also observed in the approximate interval from ground surface to seven feet bgs at approximately 20 percent of the locations sampled during the RFI. Based on information collected for the RFI report, this material consisted of foundry sand and was associated with the foundry casting facility reportedly in operation at the Site during the late 1940s and early 1950s. Brick, vesicular glass (slag), and wood were also found associated with the deposits. The only area where these slag-like deposits were not consistently observed was the southern portion of the facility, south of the east-west road.

2.2 Vadose Zone

The vadose zone currently occurs on-site between the ground surface and approximate depths of 60 to 65 feet bgs. Prior to the recent drought, the vadose zone typically ranged from 35 to 50 feet bgs. The vadose zone at the Site consists of the Bellflower aquitard, the Gage aquifer, and the unnamed fine-grained aquitard beneath the Gage aquifer. Based on Site boring logs, the Gage aquifer is approximately 15 feet thick, occurring generally between 15 and 30 feet bgs. Based on October 2004 water level monitoring results for well location MW-6A, perforated in the interval from 10 to 30 feet bgs, the Gage aquifer is currently unsaturated. Well MW-6A is located along the southern boundary of the Site. Approximately 20 years of monitoring since the well was installed in 1985 have never indicated saturation of the Gage at that location. Water levels at the Site generally rose from the late 1980s through the mid to late 1990s. During this time of historically high groundwater levels, saturation was not observed in the Gage aquifer at the location of MW-6A. Conditions in other portions of the Site are unknown as MW-6A is the only location on Site where the Gage aquifer is monitored.

The aquitard that underlies the Gage aquifer is approximately 20 to 30 feet thick and is primarily composed of silts and clays. Cross-section A – A' (Figure 2-1) follows a northeast to southwest alignment, goes through several facility process areas (former zinc storage area, former chromic acid UST area, Pond 1 area, and the ferric chloride area). The cross-section is also aligned along the axis of groundwater flow. As indicated on the cross-section, the aquitard thins in the extreme southwestern portion of the Site and appears to be inter-bedded with a coarser-grained sandy unit. In localized areas where the Bellflower aquitard consists of coarser-grained materials, there is the possibility for surface spills or leaks to migrate vertically to the unsaturated Gage aquifer (or saturated Gage aquifer in the event it saturates at some future time), where contaminants may then migrate both laterally and vertically. In the event that the Gage becomes saturated in the future, the orientation of the top of the aquitard underlying the Gage aquifer will affect groundwater flow. If the top of the aquitard is relatively flat, this would minimize the possibility of contaminant migration. If the top of the aquitard is sloped and dips in one direction, this would increase the possibility for contaminant migration in the direction of the dip.

The upper surface elevation of the aquitard underlying the Gage aquifer was plotted to determine if a gradient exists (Figure 2-4). Only wells or borings where the contact was directly observed in lithologic samples or where the contact could be extrapolated based on 1.5-foot long split-spoon samples collected at five-foot intervals were utilized, as shown on the figure. Surveyed ground surface elevation data were available for all monitoring well locations, however, ground surface elevation data for soil borings were estimated using the topographic contours provided in Figure 8, Appendix E. Due to the various uncertainties and extrapolations performed during the evaluation, the elevations shown on Figure 2-4 were rounded to the nearest foot.

The contact between the Gage aquifer and the underlying aquitard was observed or extrapolated at depths ranging from approximately 25 to 30 feet bgs. Based on Figure 2-4, no significant gradient exists, as the upper surface is fairly level and occurs at an elevation approximately 120 to 127 feet above MSL. The exception is a narrow band along the northwestern boundary of the Site, where the contact elevations are lower and generally range from 114 to 118 feet above MSL. As shown on Figures 2-1 and 2-2, the bottom of the unnamed aquitard, and therefore its thickness, has been estimated based on a limited number of data points.

Quantitative laboratory moisture data are available for nine soil samples collected from the vadose zone in the area of the former fuel UST area during the RFI. Moisture contents of two samples collected from the Bellflower aquitard were 12 and 15 percent (see RFI Table 4-7). In five samples collected from the unsaturated Gage aquifer, moisture contents ranged from 5 to 13 percent. Moisture content increased in two samples collected from the aquitard beneath the Gage aquifer. A moisture content of 17 percent was reported for a sample collected from a depth of 32 feet bgs (UST-SB4), with 21 percent reported for a sample collected from a depth of 37 feet bgs (UST-SB3). Moisture content in four samples collected during the Phase II RFI (boring MW-16) in the interval from 10 to 65 feet bgs ranged from 7.0 to 15.1 percent (see Phase II RFI Table 4-6 for moisture content and other soil characteristics). Qualitative data from boring logs indicate moisture content of the vadose zone ranged between "dry" and "damp," which is typical for an unsaturated soil.

Saturation of the Gage aquifer was not noted on any of the soil boring locations advanced during the extensive RFI drilling program. At one location (PI-5), locally wet materials were noted at approximately 15 feet bgs. According to the field geologist who logged the boring, the "locally wet" qualifier indicated the presence of higher moisture content in small, localized portions of the sample. If saturation had been observed (and it was not), it would have been indicated on the boring log for the location. At some locations (e.g., UST-SB4 and WMU46-SB2), "wet" sediments referring to the presence of petroleum product were also noted in the vadose zone.

2.3 Hollydale and Jefferson Aquifers

The Hollydale aquifer is composed of sands, silty sands, and occasional gravels. The aquifer is saturated and is approximately 40 feet thick beneath the Site.

As illustrated on Figures 2-1 and 2-2, three well locations (MW-6D, MW-13D, and MW-14D) illustrate the depth of the top and bottom, and thickness of the Hollydale aquifer underlying the Site. An aquitard of varying thickness separates the Hollydale aquifer from the deeper Jefferson aquifer. The Jefferson aquifer varies regionally in thickness from 10 to 140 feet (DWR, 1961), and is composed primarily of fine sands with occasional gravels. Soil samples confirmed the presence of the aquitard underlying the Hollydale aquifer in six of the deep well borings, where silts, silty clays, and clays were observed at depths corresponding to the base of the lower Hollydale.

With the exception of well MW-6A that is screened in the unsaturated Gage aquifer and one other possible exception (MW-15D), all of the Site wells are screened in the Hollydale aquifer. Sixteen wells (MW-1S, MW-2, MW-3, MW-4, MW-5, MW-6B, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12S, MW-13S, MW-14S, MW-15S, and MW-16) are screened in the upper portion of the Hollydale aquifer. Screen lengths in the shallow wells typically range from 20 to 30 feet. Six wells (MW-1D, MW-4A, MW-6D, MW-12D, MW-13D, and MW-14D) are installed in the lower portion of the Hollydale aquifer. Screen lengths in the deeper wells are 15 feet, with the exception of MW-4A where the screen is 20 feet in length. Screen lengths for all wells are summarized in Table 5-1 in Appendix F. Depending on site-specific conditions (e.g., vertical extent of contamination, subsurface lithology, source and type of contamination, etc.) wells with longer screened lengths may yield results with relatively less contaminant concentrations than wells with shorter screened lengths completed in the same aquifer. Differences in screen lengths may not be as important a consideration where contaminants are being monitored solely in the dissolved phase. In the event that additional wells are required at the Site as a part of future Corrective Action, wells with shorter screen lengths (i.e., 10 to 15 feet) will be proposed and installed.

As was observed for the aquitard separating the Gage aquifer from the Hollydale aquifer, the aquitard separating the Hollydale aquifer from the Jefferson aquifer also appears to thin in the extreme southwestern portion of the Site. Although silty materials were noted at depths of 100 and 105 feet bgs in the MW-15D boring, clay was not observed and the silt thickness was not considered sufficient to indicate the existence of an effective aquitard in this area. Well MW-15D is the deepest Site well, and is perforated in the interval from 108.5 to 123.5 feet bgs. The other deep Site wells are perforated to maximum depths ranging from approximately 93 to 107 feet bgs. The RFI Report theorized that the Hollydale and Jefferson aquifers were possibly merged in the extreme southwestern portion of the Site. Well MW-15D, therefore, is possibly screened in the merged lower Hollydale/upper Jefferson aquifers. As no Site wells penetrate the Jefferson aquifer, site-specific information on the depth and thickness of the Jefferson aquifer underlying the Site is not known.

Hollydale aquifer parameters were calculated through aquifer testing performed during the RFI. Transmissivity values ranged from 16,500 gallons per day per foot (gpd/ft) in the upper Hollydale aquifer at the location of MW-4 to 99,000 gpd/ft at the location of well MW-14S. Storage coefficients ranged from 0.01 to 0.009. Storage coefficients of most confined aquifers typically range from about 0.00001 to 0.001, whereas most unconfined aquifers typically range from 0.1 to 0.3. Hydraulic conductivity values varied from 412 to 2,300 gdp/ft2, which falls within the expected range for similar types of materials.

Based on the analyses performed, the Hollydale aquifer appears to be a leaky confined aquifer in the area beneath the Site. The Hollydale aquifer, therefore, may gain/lose water from/to the underlying Jefferson aquifer, particularly in the southwestern portion of the Site where the aquifer appears to be merged with the Jefferson (CDM, 1991). The Hollydale aquifer may also be semi- to unconfined in the southwestern portion of the Site where the aquitard underlying the Gage aquifer is of negligible thickness and interbedded with coarser-grained materials.

2.4 Water Level and Groundwater Flow Direction

Recent depth to water measurements and groundwater elevations for Site wells were summarized in Table 5-1 of the October 2004 Quarterly Groundwater Sampling and 2004 Annual Groundwater Monitoring Report (CDM, February 2005). During the October 2004 monitoring event, depth to water in shallow Site wells ranged from 59.11 feet bgs (MW-6B) to 66.33 feet bgs (MW-3). Figures 5-1 and 5-2 illustrating groundwater contours and direction of flow for shallow (upper Hollydale) and deep (lower Hollydale) Site wells were also provided in the quarterly report. Groundwater flow direction in the shallow wells during October 2004 was to the southwest at an average gradient of 0.005 feet per foot (ft/ft). Groundwater flow direction in the deep wells was also towards the southwest and at an average gradient of 0.006 ft/ft. Figures 5-1 and 5-2 and Table 5-1 from the quarterly report are provided in Appendix F of this document.

Monitoring performed since 1985 has indicated a groundwater flow direction that is consistently towards the southwest. Beginning in 1991, groundwater elevation at PTI rose in response to abnormally large amounts of precipitation that began in late 1990 (Figure 4, Appendix G). Precipitation rates returned to normal in about 1998, causing water levels to return to pre-1991 levels in about 1999. In response to drought conditions during the past few years, water levels in Site wells have exhibited an overall steady decline. The water level in well OW-04, for example, declined from 46.68 feet bgs to 63.60 feet bgs (approximately 17 feet) during the 3-year period from October 2001 to October 2004. As precipitation during late 2004/early 2005 was well above average, water levels in Site wells are expected to rise during 2005.

Depth to water and groundwater elevation summary tables have been included in quarterly monitoring reports since the inception of groundwater monitoring at the Site in 1985. In the October 2004 quarterly report, water levels from January 1998 to the present for all measured wells were provided and tabulated. PTI has agreed to retrieve water level/groundwater elevation data from all available historical reports, input the data into the database, and provide interwell hydrographs illustrating the data in subsequent quarterly reports.

Using readily available data, hydrographs for shallow and deep wells were generated, and are provided in Appendix F, Figures 5-3 and 5-3, respectively. All measured wells from 1998 to the present are included on the two figures, with groundwater elevations for wells MW-4 and MW-4A plotted from 1989 to the present. A hydrograph illustrating groundwater elevations at MW-4 compared to MW-4A for the period from 1989 to the present, and a graph illustrating the differences in elevation between the two wells are also provided in Appendix F. Figures 5-3 and 5-4 illustrate that water level changes (from 1998 to the present) at Site wells have been very consistent.

As illustrated by the figure in Appendix F comparing groundwater elevation differences between MW-4 and MW-4A, groundwater elevations in deeper well MW-4A were generally slightly higher than groundwater elevations in shallow well MW4. The data indicate a very slight upward vertical gradient from the lower to the upper Hollydale aquifer during most of the monitored period. Prior to 1994 and recently (late 2003 and early 2004), the reverse was observed, however, the recent differences were minor compared to the pre-1994 differences. Additional graphs comparing groundwater elevations between shallow and deep well pairs will be prepared and provided in quarterly monitoring reports when the water level/groundwater elevation database update is completed. A tabular summary of all historical water level data will also be included in the quarterly reports.

Quarterly monitoring reports for the Site routinely include figures illustrating hexavalent chromium, total chromium, and cadmium concentrations vs. water levels for well MW-4. Owing to the location of well MW-4 adjacent to Pond 1 and downgradient from the former chromic acid UST, and historical and current detections of hexavalent chromium, total chromium, and cadmium in the well, it was selected as the "key" well for evaluating trends in water levels at the Site.

Review of water level for well MW-4 (Appendix F) for the period from January 1989 through October 2004 indicates that a delayed reaction occurs as the greatest amount of precipitation typically falls in the winter months, but highest groundwater levels occur generally in mid summer months. The delay between the occurrence of precipitation and corresponding response in the Hollydale aquifer at the site suggests that recharge to the Hollydale aquifer occurs upgradient and not on site, and the groundwater under the site is recharged by through-flow.

2.5 Storm Water

All storm water which falls within process and chemical storage areas of the Site is retained, reused to the fullest extent possible, and treated on-site before being discharged to the Los Angeles County Sanitation District system.

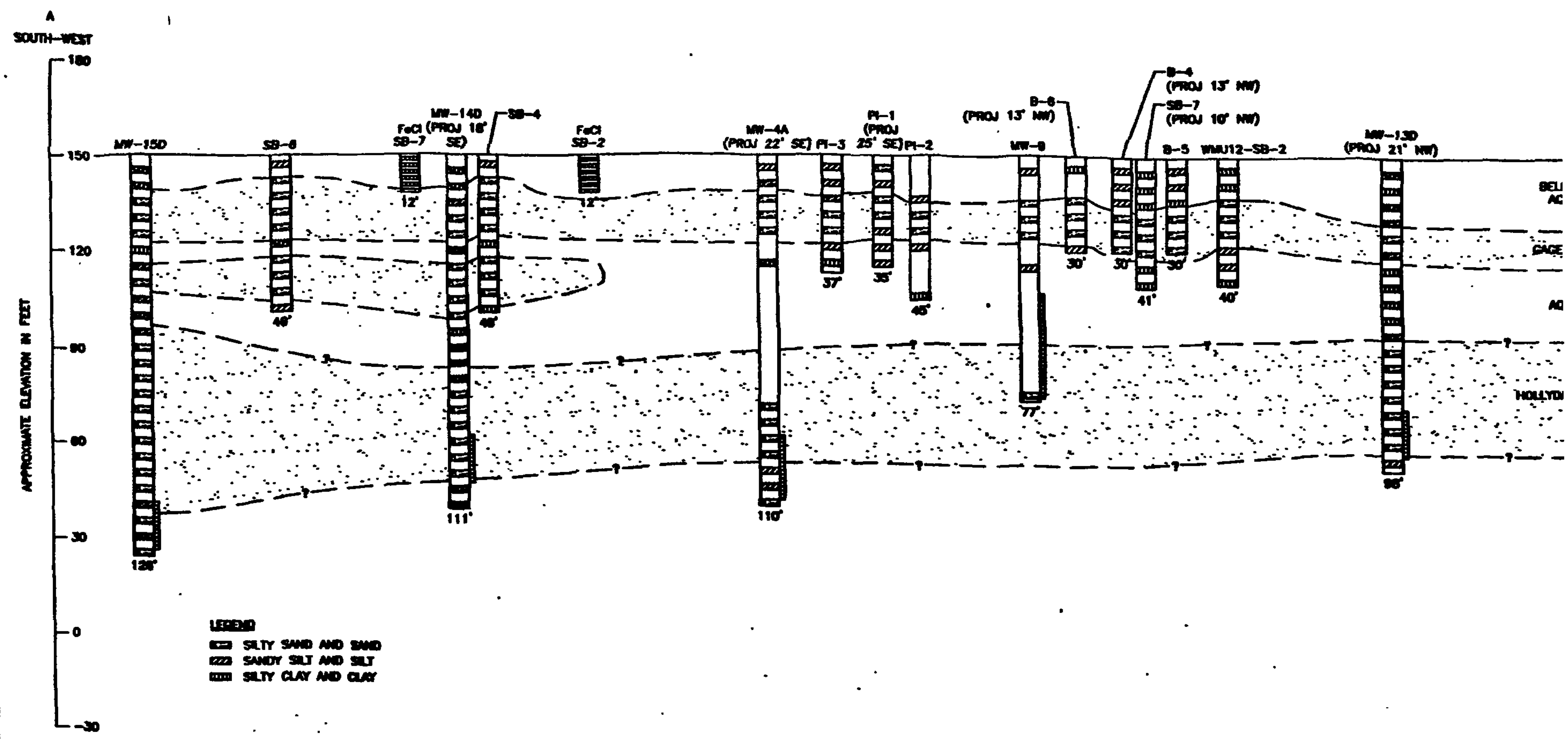
The natural slope of the site is from north to south, with a centrally located main collection sump, which collects rainwater. The southern portion of the site has been modified in areas so that the terrain slopes north to the central collection sump. Most of the site is sloped such that all rainwater collects in the main collection sump. Arrows indicating the direction of surface flow during rain events and containment features (e.g., berms, asphalt and concrete paving, walls, etc.) are indicated on Plate 1.

The concrete curb along the north, east, and west sides of the property is generally in good condition and is serviceable. Asphalt berms on the south side of the property are also in good and serviceable condition. In the past, the area by the maintenance shop did not have a containment berm, and rainwater was allowed to flow off-site and into the adjacent drainage ditch.

The general overall condition of the concrete and asphalt ground cover is good. Where areas are covered with asphalt, the asphalt is either relatively new (less than 2 years old) or had recently been slurry sealed. All asphalt, including berms, was serviceable and appeared to be sufficiently sealed to inhibit infiltration. The concrete in general is in good and serviceable condition.

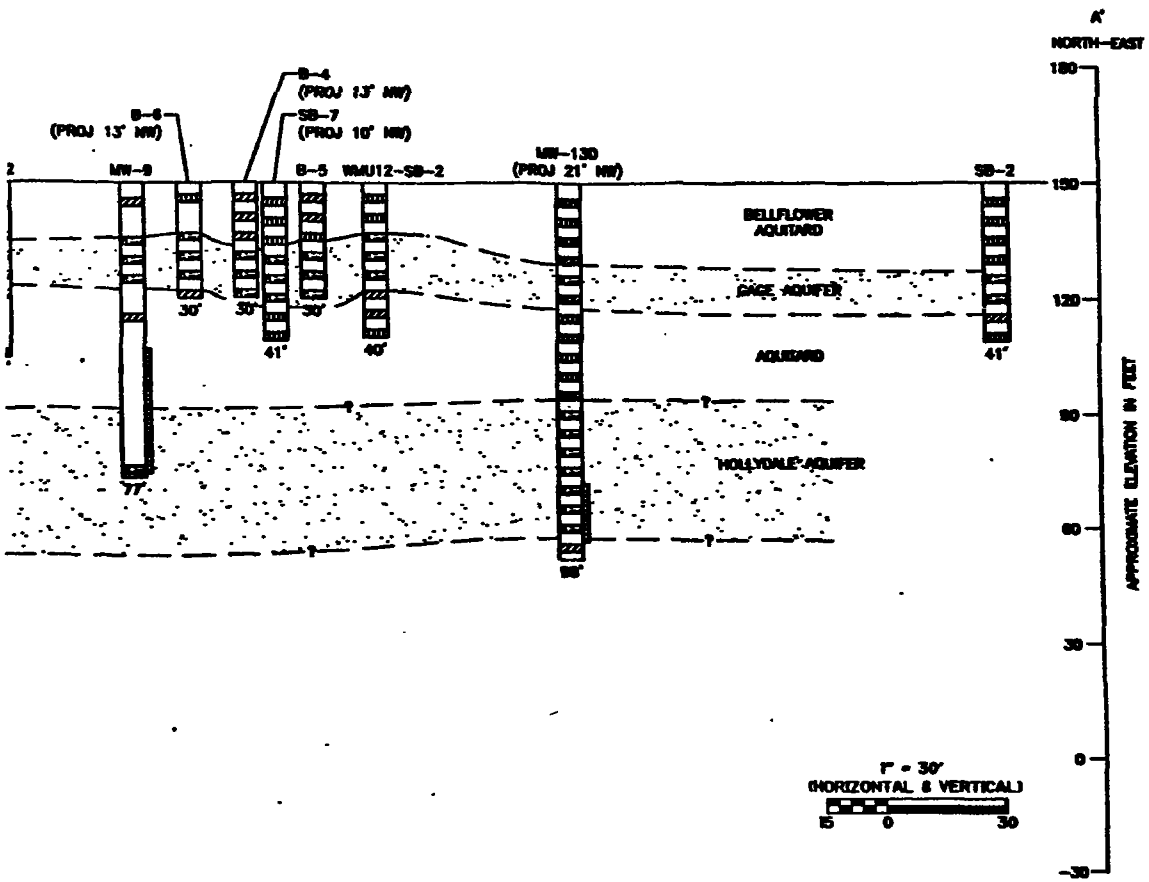
The property to the northeast of the Site has a history of shedding rainwater onto the property. To prevent this, a retention wall was installed to divert rain run-off to a drain line installed beneath PTI's main access driveway. The southeast portion of the facility (main office trailer, employee parking lot, and truck scales) is isolated from the process and chemical storage areas of the facility by secondary containment berms and does not receive runoff from these areas.

The only area of the property not covered with a layer of concrete or asphalt is the rail spur on the south side of the facility. Ground cover at the rail spur consists of crushed rock ballast for the railroad tracks. In the past, buckets were reportedly used by staff to contain incidental leaks. Currently, portable drip pans are utilized to contain incidental leaks during transfer of product from the rail cars.



A
SOUTH-WEST
180
150
120
90
60
30
0
-30
APPROXIMATE ELEVATION IN FEET
MW-15D
SB-8
FeCl SB-7
MW-14D (PROJ 18' SE)
SB-4
FeCl SB-2
MW-4A (PROJ 22' SE)
PI-3
PI-1 (PROJ 25' SE)
PI-2
B-6 (PROJ 13' NW)
MW-8
B-4 (PROJ 13' NW)
SB-7 (PROJ 10' NW)
B-5
WMU12-SB-2
MW-13D (PROJ 21' NW)
12'
12'
46'
46'
111'
110'
37'
35'
45'
77'
30'
30'
41'
30'
40'
98'
126'
LEGEND
SILTY SAND AND SAND
SANDY SILT AND SILT
SILTY CLAY AND CLAY

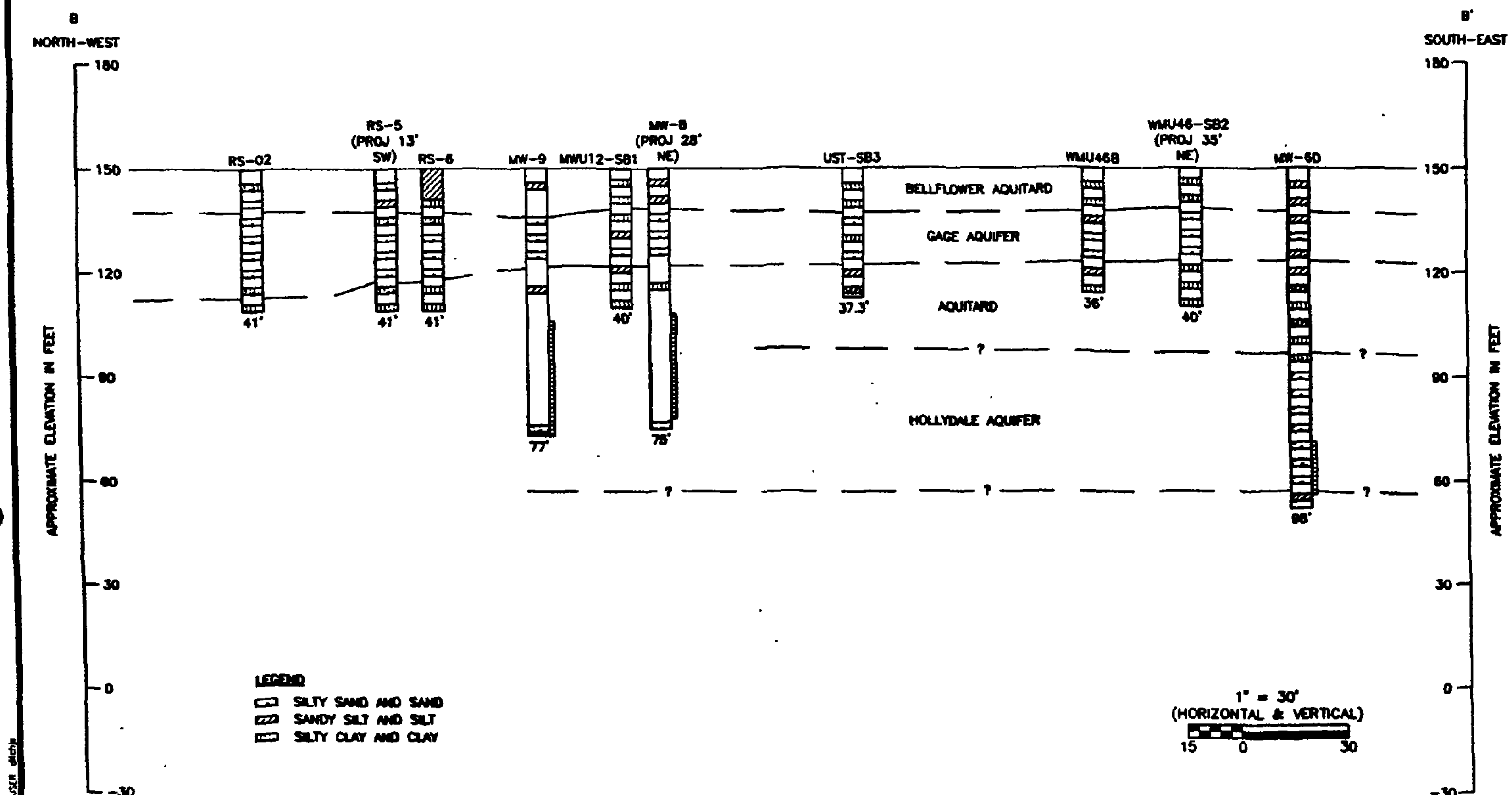
CDM



PHIBRO-TECH, INC.
SANTA FE SPRINGS, CA

GENERALIZED SUBSURFACE CROSS SECTION A-A'

Figure 2-1



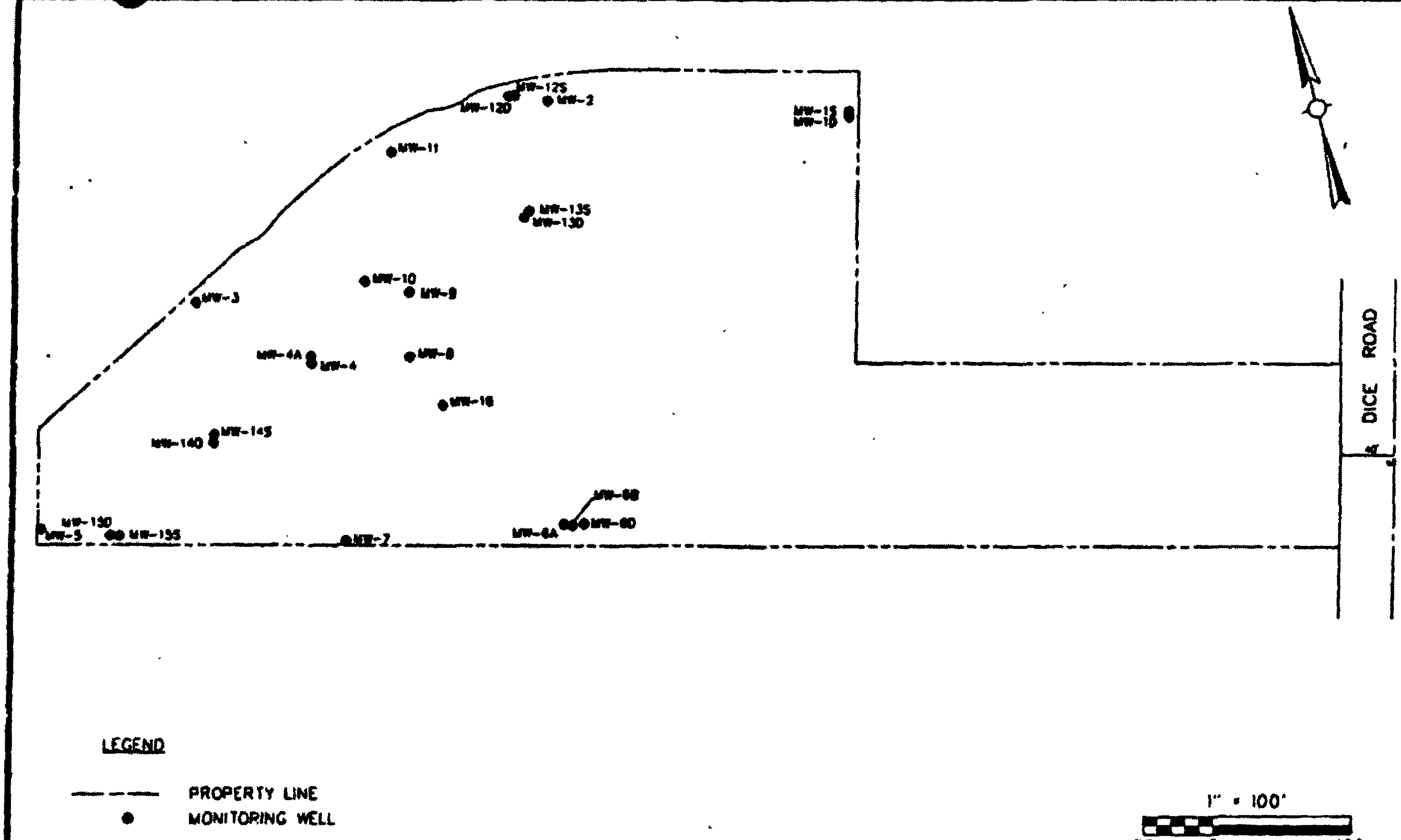
CDM

PHIBRO-TECH INC
SANTA FE SPRINGS

GENERALIZED SUBSURFACE CROSS SECTION B-B'

Figure 2-2

N:\DOSDATA\ ECTS\2279-111\CAD\FIG_2-1 03/21/97 09:58:13 45 J. La Madrid

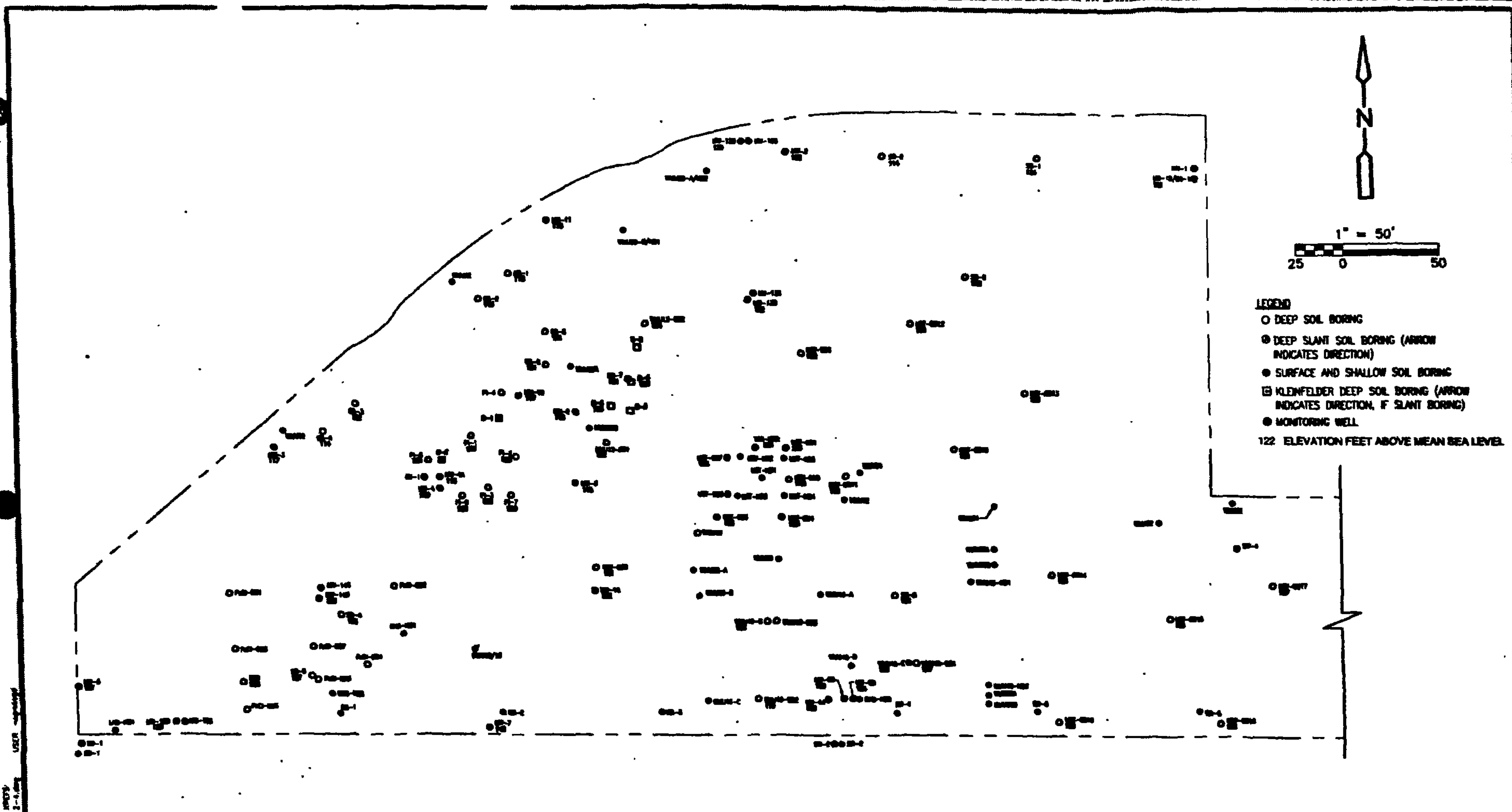


PHIBRO-TECH, INC., SANTA FE SPRINGS, CA

CDM
environmental engineers, scientists, planners, & management consultants

MONITORING WELL LOCATION MAP

Figure 2-3



NOTE: Values extrapolated using soil samples collected at 5-foot intervals or less. Data not available or sample interval greater than 5 feet if values are not shown

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CDM

Approximate Elevation of Top of Aquitard Underlying the Gage Aquifer

Figure 2-4

Section 3
Distribution of Contaminants in Soil Gas, Soil Matrix, Groundwater, and Surface Water

This section illustrates the results of prior soil investigations, with the results illustrated on Plates 1 through 7. Graphics illustrating soil vapor sampling results from the Final Phase I Corrective Action Soil Vapor Survey Report are provided in Appendix E. Tables summarizing historical and current groundwater sampling results are provided in Appendix F. Time series plots for all VOCs detected in groundwater in all on-Site wells, and time series plots for cadmium, total chromium, hexavalent chromium, and TCE for the majority of the sampled Site wells are also provided in Appendix F.

3.1 Soil Gas Contaminant Distribution

CDM completed a soil gas investigation in the northwest portion of the Site during 2001 (CDM, 2001). Samples were generally collected to maximum depths of 25 to 28 feet bgs and analyzed on site for a suite of VOCs. Additional samples were also taken in Summa canisters, which were analyzed according to USEPA Method TO-14A. Analytical results are summarized in Table 3-1, Appendix E.

Samples from depths of 5 feet bgs were generally collected from finer-grained materials representing the Bellflower aquitard, with samples collected from 18 and 25 to 28 feet depths generally collected from coarser-grained materials representing the unsaturated Gage aquifer. One sample (SV-17) was collected from a depth of 40 feet bgs in the fine-grained aquitard underlying the Gage aquifer.

The Final Phase 1 Corrective Action Soil Vapor Survey (SVS) Report (CDM, November 2001) illustrated the findings of the investigation in detailed figures and cross-sections. Figures 3-1 through 3-13 from the SVS report have been provided in Appendix E. The locations of the current site features discussed below are illustrated on Figure 3-11, Appendix E.

The shallow TCE footprint extends NE-SW approximately between the spent container storage area (SCSA) and plate-and-frame filter press (Figure 3-7, Appendix E). Concentrations range up to 62 ug/L (vapor; ppbv) southwest of the SCSA. The deeper footprint extends NE-SW approximately between the SCSA and the southern end of Pond 1 (Figure 3-8, Appendix E). Concentrations of up to 452 ug/L occur underneath the SCSA.

1,1-DCE was detected in shallow soil gas samples, creating a footprint which trends NE-SW between the SCSA and Tank ST-1 (Figure 3-3, Appendix E). Concentrations range up to 6.8 ug/L under the SCSA. In deeper samples, the overall footprint trends

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NE-SW between the SCSA and the boilers (Figure 3-4, Appendix E). Concentrations of up to 330 ug/L were detected northeast of the production manager's office.

1,1-DCA occurs in shallow samples such that the overall footprint extends NE-SW in the approximate area between the SCSA and the plate-and-frame filter press. Maximum concentrations of up to 8.3 ug/L occur near the spent container storage area. Concentrations in deeper samples form an overall footprint extending between the SCSA and the boilers (Figure 3-5, Appendix E). Concentrations up to 330 ug/L were detected just north of the former chromic acid UST. Deep sample results are illustrated in Figure 3-6, Appendix E. The deeper soil vapor plume is more laterally extensive than the shallow plume.

The lateral distribution of 1,1,1-TCA in shallow samples extends between the area southwest of the SCSA and Tank ST-1 (Figure 3-9, Appendix E). A maximum concentrations of 3.4 ug/L was detected east of Tank ST-1. In deeper samples, the footprint extends between the ammonia tank and the area north of the plate-and-frame filter press (Figure 3-10, Appendix E). A maximum concentration of 310 ug/L was detected just north of the former chromic acid UST. The vertical distribution of selected chlorinated compounds and total VOCs is illustrated on two cross-sections (Figures 3-12 and 3-13, Appendix E).

Benzene, toluene, ethylbenzene, and total xylenes (BTEX) were detected in soil vapor samples less frequently and at lower concentrations compared to chlorinated VOCs. A maximum benzene concentration 8.6 ug/l was detected at a depth of 18 feet bgs at location SV-18, located northwest of the former fuel UST area. A maximum toluene concentration of 11 ug/l was detected at as depth of 18 feet bgs at location SV-17, located north of the former chromic acid UST. Maximum concentrations of 8.1 ug/l m,p-xylenes and 3.5 ug/l ethylbenzene were detected at a depth of 25 feet bgs at location SV-18.

A comparison of soil vapor and groundwater VOC concentrations is provided in Table 4-1, Appendix E. Evaluation of the results summarized in the table indicates that there were individual VOCs in soil vapor that were not detected in the underlying groundwater, and vice versa. The results suggest that at least some of the VOCs in soil vapors are due to off-gassing from groundwater. This is particularly true of the results near well MW-11, where the soil vapor and groundwater VOC patterns match closely. Locations where VOCs were detected in site soil samples at various depths are discussed below. In mid-January 2005, Phase 2 SVS field work was initiated and completed at the Site. Following quality checking and evaluation of the analytical data, a report summarizing the investigation findings will be submitted to DTSC.

3.2 Soil Matrix Contamination

In 1986, 19 soil borings were advanced on site with selected soil samples analyzed for pH, cadmium, chromium, copper, zinc, nickel, chloride, sulfate, ammonia nitrogen, and carbonate (Kleinfelder, 1986). Soils analytical results from the 1986 investigation are provided in Appendix E. Thirteen of the borings were converted to groundwater monitoring wells (MW-1 through MW-11), with well pairs installed at two well locations (MW-4/MW-4A and MW-6A/MW-6B).

The 1991 RFI included a major soil sampling program that involved sample locations across the entire site. A Phase II RFI was subsequently performed in several areas of interest (former Fuel UST area, copper cement pond area, waste acid tank area, drum storage area, and the parking lot west of the facility lab) identified during the initial RFI. The majority of the samples were analyzed for selected metals (cadmium, total and hexavalent chromium, copper, iron, nickel, lead, and zinc) and pH. Selected samples were also analyzed for arsenic, cyanide, mercury, purgeable aromatic and chlorinated volatile organic compounds (VOCs), total extractable petroleum hydrocarbons (TEPH), and polychlorinated biphenyls (PCBs). VOC analyses were performed at all "Profile" boring locations, where a full suite of analyses were performed in accordance with the RFI Work Plan. Additional samples for VOC analysis were also selected based on elevated field screening results performed during drilling and sampling using a photoionization detector (PID).

The soil sampling results from the Kleinfelder and RFI investigations are illustrated on Plates 2 through 7. For the purposes of the following discussion, soil sample results have been organized into two categories, as follows: shallow soil samples collected from ground surface to a depth of 14 feet bgs, and deep soil samples collected from depths greater than 14 feet bgs. The "shallow" soil samples generally correlate to the Bellflower aquitard, with "deeper" soil samples generally collected from units underlying the Bellflower aquitard. Plates 2 and 3 illustrate shallow and deep chlorinated VOC results, respectively. Plates 4 and 5 illustrate shallow and deep aromatic VOC and TEPH results, respectively. Plates 6 and 7 illustrate shallow and deep metals and pH results, respectively. Analytical summary tables from the RFI investigation are also included in Appendix E.

During the RFI, TCE was detected at elevated concentrations in soil samples collected from the following areas: 110,000 ug/kg in boring RS-6 (Relocation Site) at a depth of 3 feet bgs; 4,800 ug/kg in boring SB-7 (Former Chromic Acid UST) at a depth of 3 feet bgs; and 2,600 ug/kg in boring WMU20B (Spent Container Storage Area) at a depth of 2.2 feet bgs. Due to the long operational history of the Site (including uses unrelated to its current use) and its location in a highly industrialized area, it is extremely difficult to determine sources of observed VOC contamination. VOCs detected in soil gas and soil matrix samples are likely derived from several sources (e.g., releases associated with historical Site operations, releases associated with prior use of the Site unrelated to current use, and off-gassing from groundwater). As part of on-going Corrective Action, a Phase 2 Soil Gas Investigation has been proposed for the Site, with work plans prepared and submitted for regulatory agency review. Contributions from on- and off-site sources will be better understood once the new data have been obtained and evaluated.

3.2.1 Metals and pH

During the RFI, soil samples for background metals analysis were collected from four locations, as follows: on-site upgradient well location MW-01D/BG-01 and three off-site locations (BG-02 through BG-04). MW-01D/BG-01 and BG-02 were deeper borings (97 and 40.5 feet bgs, respectively) advanced with a hollow-stem auger drill rig, with borings BG-03 and BG-04 advanced to 11 feet bgs using a hand-auger. Two borings (A and B) were advanced at each of the hand-auger locations. Background sampling locations are illustrated on Figure 3-2, with the results summarized in Table 4-1 (both the figure and table are provided in Appendix E).

It is unlikely that the concentration of hexavalent chromium (60.5 mg/kg) detected at a depth of 30 feet bgs at the location of background boring BG-2 is naturally occurring. Review of the background data indicates that hexavalent chromium was not detected (at a detection limit of 0.5 mg/kg) at the majority of the background sample locations. Therefore, hexavalent chromium will be considered a COC at any location where it is detected in native soils.

As discussed above, samples for arsenic analysis were not collected from the background boring locations. Additional background sampling for metals analyses (including arsenic) will be performed at the Site as part of the future Risk Assessment. As the area surrounding the Site is primarily industrial, DTSC staff will be contacted regarding their local experience at other sites in the area, to assist with selecting appropriate background sampling locations and depths.

The following discussion has been organized into Areas of Concern (AOCs) where elevated metals concentrations were detected in Site soils. A brief discussion of each AOC is also included below. These AOCs are subject to revision following collection of the proposed background samples described above and statistical evaluation of the results.

Pond 1 Area

Pond 1 is an inactive surface impoundment that currently serves as secondary containment for two wastewater tanks (W-1 and W-2) that are part of the facility's wastewater treatment system. Pond 1 was constructed in 1975 by modifying the former Pond 8, which had also been used for wastewater treatment. Pond 1 was constructed by adding an additional 6-inch thickness of steel-reinforced concrete and extending the walls. The dimensions of Pond 1 are approximately 37 feet by 37 feet. The Pond extends partially below grade and has a capacity of 36,000 gallons. Pond 1's use as a surface impoundment was discontinued in July 1985. Shortly thereafter, it was put into service as secondary containment for wastewater tanks W-1 and W-2. Pond 1 has been identified as an AOC at the Site.

Soil samples were collected from 3 borings located within Pond 1 (PI-1, PI-2, and PI-3), and six borings adjacent to Pond 1 (PI-4, PI-5, PI-6, PI-7, B-1, B-2). Soil samples were also collected from three monitoring wells located adjacent to Pond 1 (MW4, MW4A, and MW10).

Shallow Soils
As illustrated on Plate 6, elevated metals were detected in shallow soils underlying Pond 1 (see borings PI-1, PI-2 and PI-3). The metal found at the highest concentrations in the three borings was total chromium, with a maximum concentration of 37,000 mg/kg detected at a depth of 2.5 feet bgs in boring PI-1. The concentration of total chromium declined to 894 mg/kg in the soil sample collected from a depth of 12 feet bgs in the boring. pH values were also observed to decline from 10.0 to 4.1 within the same interval.

Hexavalent chromium concentrations observed at the three boring locations within Pond 1 were generally orders of magnitude lower than the total chromium concentrations. Hexavalent chromium was detected at a depth of 12 feet bgs in boring PI-1 and 0.5 feet bgs in boring PI-3 (concentrations of 94.5 and 143 mg/kg, respectively). Cadmium was detected in six of the 12 shallow samples, with a maximum concentration of 5.1 mg/kg detected in boring PI-1 at a depth of 2.5 feet bgs. Copper concentrations were generally elevated, with maximum concentrations of 1,180 mg/kg, 2,110 mg/kg and 1,260 mg/kg detected in shallow soil samples collected from borings PI-1, PI-2 and PI-3, respectively. Nickel, lead and zinc were generally not detected at elevated concentrations in the three borings.

A comparison of the results from the adjacent boring locations (PI-4 through PI-7, and B-1) with the results from the interior Pond 1 boring locations shows that cadmium, chromium, copper, nickel, lead and zinc were generally detected at elevated concentrations. Hexavalent chromium was detected in 2 of the 11 samples collected from the three adjacent borings, at a concentration of 21.4 mg/kg in PI-5 (1.5 feet bgs) and 0.74 mg/kg in PI-7 (10 feet bgs). Hexavalent chromium was not detected in samples collected from PI-6.

An arsenic concentration of 72 mg/kg was detected at a depth of 2.5 feet at boring location PI-1. Arsenic was detected in 26 of the 50 samples collected for arsenic analysis during the RFI, and this was the maximum reported concentration for the on-site samples. The concentration rapidly declined to 21 mg/kg at a depth of 3 feet bgs in boring PI-1.

Deep Soils
Metals and pH results from soil samples collected at depths in excess of 14 feet bgs within and in the immediate vicinity of Pond 1 are illustrated on Plate 7. Detected concentrations were generally less in the deeper samples compared with the shallow samples. The primary exception was the detection of hexavalent chromium at a concentration of 199 mg/kg in boring PI-2 at a depth of 32 feet bgs. Hexavalent chromium was not detected in the final sample collected from boring PI-2 a depth of 36.5 feet bgs.

pH values at interior Pond 1 locations PI-1, PI-2, and PI-3 were generally observed to steadily decline with increased depth (e.g., pH value of 10.0 at 2.5 feet bgs in boring PI-1 declined to 3.6 at a depth of 37 feet bgs). This trend was also observed at boring location PI-7. The possible significance of this finding will be discussed in Section 4 of this document.

Arsenic concentrations in samples collected from boring PI-1 in the interval from 17 to 37 feet bgs ranged from 3.30 mg/kg at a depth of 17 feet bgs to 19.20 mg/kg at a depth of 37 feet bgs.

Former Chromic Acid UST
A fiberglass 3,000-gallon UST (WMU12) was removed from the site in approximately 1981. The UST formerly contained a low pH chrome etching solution which was a mixture of chrome, copper, chloride, ammonia, nitrogen, and sulfate (Kleinfelder, 1986). The UST was located just southwest of the present location of the ammonia AST, and was installed to a depth of 8 feet bgs. Four soil borings (B-3 through B-6) were advanced to depths ranging from 15 to 25 feet bgs in the immediate area of the former UST during the Kleinfelder investigation. Boring SB-7, a profile location where additional analyses were performed, was placed at the approximate location of boring B-5. During the Phase II RFI, two additional borings were advanced north and south of the area to evaluate the extent of contamination associated with the former chromic acid UST. All three RFI borings were advanced to a depth of 40 feet bgs.

Shallow Soils
At location SB-7, cadmium, total chromium, copper, nickel, lead, zinc and hexavalent chromium were detected in shallow soils at elevated concentrations. Total chromium and copper concentrations were generally elevated at boring locations B-3 through B-6. Boring locations SB-7 and B-4, which were located closest to the former chromic acid UST, were the locations where total chromium concentrations were most elevated. A maximum total chromium concentration of 12,000 mg/kg was detected at a depth of 5.5 feet bgs in boring SB-7, with 16,000 mg/kg detected at a depth of 10 feet bgs in boring B-4. Hexavalent chromium was detected at a maximum concentration of 1,040 mg/kg at a depth of 5.5 feet bgs at location SB-7. Arsenic was also detected at a concentration of 15 mg/kg at a depth of 3.5 feet bgs in boring SB-7.

Deep Soils
Total and hexavalent chromium were detected at elevated concentrations throughout the entire drilled depth (40.5 feet bgs) of boring SB-7. Total chromium was detected at a maximum concentration of 7,130 mg/kg at 20.5 feet, declining to 979 mg/kg at 40.5 feet bgs. Hexavalent chromium was detected at a maximum of 1,160 mg.kg at a depth of 40.5 feet bgs.

pH values declined fairly steadily from 7.5 at a depth of three feet bgs to 3.3 at a depth of 30.5 feet bgs. At 40.5 feet, pH increased to 6.5. At boring location B-4, pH was also low, ranging from 4.6 at a depth of 5 feet bgs to 4.0 at a depth of 10 feet bgs. At location B-5, a short distance north of the former chromic acid UST, the soil sample collected from 15 feet bgs contained higher total chromium and copper concentrations and lower pH compared to the shallow samples collected from 5 and 10 feet bgs in the boring. As discussed in Section 4, the former chromic acid UST is believed to be the source of the elevated chromium and low pH detected in deep soils underlying the Pond 1 area.

Hexavalent chromium was not detected in Phase II RFI borings WMU12-SB1 and WMU12-SB2 to depths of 40 feet bgs. Cadmium, chromium, copper, and nickel concentrations were slightly elevated at these two locations. In addition, pH values ranged from 6.5 to 7.8.

Arsenic was not detected in samples collected from boring SB-7 at depths of 15.5, 20.5, and 30.5 feet bgs. It was detected at a concentration of 31.00 mg/kg in the sample collected at a depth of 40 feet bgs, but was not detected in the sample collected at 40.5 feet bgs.

Former Fuel UST

Two fuel USTs were removed from the Site in July 1989. One tank contained diesel, one gasoline, and each had a 10,000-gallon capacity. The excavation was reportedly 12 to 15 feet deep, 25 feet wide, and 35 feet long. The excavation was reportedly backfilled with clean fill dirt after the completion of RFI field sampling activities (personal communication between Mr. Mark Alling and Mr. Ed Vigil, March 14, 2002).

With the exception of boring UST-SB7, soil samples for metals analysis were not collected from the former fuel UST area borings. Three samples were collected from boring UST-SB7 at depths of 5.5, 17, and 40.5 feet bgs and analyzed for arsenic. Concentrations of 4.9, 4.1, and 18 mg/kg were reported for the three samples.

Total and hexavalent chromium were also analyzed from samples collected from boring UST-SB7 at depths of 4.5, 15, and 34.5 feet bgs. A maximum concentration of 22.1 mg/kg total chromium was detected in the sample collected from a depth of 4.5 feet bgs. Hexavalent chromium was not detected in any of the samples.

Former Copper Cement Pond Area

The area generally bounded by the "C" process area to the west, the facility maintenance shop to the east, the facility roadway to the north, and the railroad tracks to the east was formerly used as a copper cement drying area. The area consisted of six ponds which were used for drying copper cement product from the 1960s to the 1980s. Several of the ponds were reportedly constructed with concrete, with the remainder constructed of a mat material covered with asphalt and a sealant. One of the former concrete ponds is currently in use as rainwater tank 3. Based on observations made during the RFI, the floor of tank 3 extends approximately one to two feet below grade. It was assumed that the other ponds were constructed similarly.

Numerous soil borings were advanced in the area during the initial and Phase II RFI investigations. In addition, profile boring SB-8 was advanced to a depth of 40.5 feet bgs in the northeastern portion of the area.

Shallow Soils

Shallow borings WMU46-A through WMU46-B, WMU46-SB3, WMU46-HB1 and WMU46-HB2 were advanced in the former copper cement pond area. Shallow soil samples were also collected from deeper soil borings SB-8, WMU46-SB1, and WMU46-SB2. Copper, nickel, lead, and zinc were detected at elevated concentrations in many shallow soil samples collected from the area. For example, maximum concentrations of 23,100 mg/kg copper, 11,800 mg/kg nickel, 18,300 mg/kg lead, and 14,600 mg/kg zinc were reported in the WMU46-A through E borings. Hexavalent chromium was not detected at the majority of the sampled locations.

Deep Soils

Soil boring locations WMU46-SB2 and SB-8 were both advanced to 40 feet bgs. At location WMU46-SB2, a total chromium concentration of 48 mg/kg at a depth of 35 feet bgs, and a copper concentration of 45 mg/kg at a depth of 40 feet bgs, were slightly elevated. Nickel, lead, and zinc concentrations were generally not elevated. Hexavalent chromium was not detected in six samples collected from boring WMU46-SB2 at depths ranging from 15 to 40 feet bgs (the maximum drilled depth). Copper and nickel concentrations in the samples collected from the maximum depth of boring SB-8 (40.5 feet bgs) were 66.9 and 35.4 mg/kg, respectively. Hexavalent chromium was also not detected in four samples collected from SB-8 at depths ranging from 15.5 to 40.5 feet bgs (the maximum drilled depth).

Ferric Chloride Area

In order to stabilize the soils in the ferric chloride area (WMU18/19) prior to proposed redevelopment, shallow soils were reportedly mixed with lime to increase the pH of the soils. Analytical results for shallow soil samples collected for metals analysis from borings SB-4 through SB-6, FeCl-SB4, DHS-HB1, and WMU18/19 are illustrated on Plate 6.

Shallow Soils

Cadmium was detected at the majority of the sampled locations. A maximum concentration of 3.6 mg/kg cadmium was detected in the sample collected from the interval from ground surface to 1.5 feet bgs at location DHS-HB1. Total chromium, copper, nickel, lead, and zinc were generally elevated, with maximum concentrations (828 mg/kg total chromium, 9,660 mg/kg copper, 1,070 mg/kg nickel, 1,000 mg/kg lead, and 869 mg/kg zinc) detected at the WMU18/19 location.

Hexavalent chromium was not detected at the majority of the sampled locations and, where it was detected, it was at relatively low levels. Arsenic was also not detected in three samples collected from boring FeCl-SB4 to a depth of 11.5 feet bgs, however, it was detected in all three samples collected from boring WMU18/19. The concentration in the sample collected from 3 to 4 feet bgs was slightly elevated. pH values were variable, with a low of 3.2 at location WMU18/19 and a high of 11.41 at location SB-4, at depths between 5 and 6 feet bgs.

Deep Soils

Soil borings SB-4 through SB-6 were advanced to depths ranging from 45 to 49 feet bgs. Total chromium concentrations were generally elevated at locations SB-4 and SB-5, with sporadic elevated copper detections at those locations. Cadmium was detected in all deep soil samples collected from borings SB-4 and SB-6. Concentrations ranged from 0.12 to 0.37 mg/kg at location SB-6, and from 0.06 to 0.25 mg/kg at location SB-4. pH values were low at all three locations through the sampled intervals, ranging from 3.14 at a depth of 21 feet in boring SB-6 to 5.34 at a depth of 16 feet bgs in boring SB-4.

Hexavalent chromium was detected at relatively low concentrations at two of the three deep boring locations (SB-4 and SB-5). Maximum concentrations of 51.1 mg/kg at 25.5 feet bgs in boring SB-4, and 7.27 mg/kg at 15.5 feet bgs in boring SB-5 were reported. Hexavalent chromium was not detected in six samples collected from boring SB-6at depths ranging from 15.5 to 46 feet bgs.

Former Zinc Pond Area

The Current Conditions Report indicated that an unpaved area in the northern portion of the Site was used for zinc storage, with a bermed area containing three storage tanks or ponds (see Figure 6, Appendix E). Neutralization sludges were also reportedly deposited in a depression in the area. In 1976, 720 cubic yards of material were removed from this area and disposed at a Class 1 landfill.

Two borings, SB-1 and SB-2, were advanced to a depths of 40 and 40.5 feet bgs, respectively, in the former zinc pond area. Cadmium and hexavalent chromium were generally detected in the shallow soil samples from the borings, but were not detected in the deeper samples collected in the approximate interval from 15 to 40 feet bgs. The concentrations detected in shallow samples collected from boring SB-2 were significantly higher than the concentrations detected in SB-1.

High concentrations of several metals were detected in shallow soil samples (to 10 feet bgs) collected from boring SB-2 located in the western portion of the area. Zinc storage reportedly took place in this area. The metal detected at the highest concentration was zinc, at a concentration of 30,800 mg/kg in the sample collected from a depth of 1 feet bgs. Concentrations were also elevated in samples collected to 10 feet bgs, and declined by orders of magnitude in samples collected in the interval from 15 to 40.5 feet bgs. .

Spent Container Storage Area

Soil samples were collected from two shallow soil boring locations (WMU20-A/HB2 and WMU20-B/HB1) in the SCSA at a depth of 1 to 2 feet bgs. Cadmium, total chromium, copper, nickel, and lead were detected at both locations. Maximum concentrations of 4.7 mg/kg cadmium, 1,190 mg/kg total chromium, 770 mg/kg copper, 113 mg/kg lead, and 316 mg/kg zinc were detected in boring WMU20-A/HB2.

Miscellaneous Areas

Railroad and Drainage Ditches

Shallow soil samples (1 to 2 feet bgs) were collected from six locations along the drainage ditch (DD-1 through DD-6) and six locations along the railroad tracks (RR-1 through RR-6). Cadmium, total chromium, copper, nickel, lead and zinc concentrations were elevated at the majority of the sampled locations. Hexavalent chromium was detected at three of the 12 locations (RR-1 through RR-3), at concentrations ranging from 9.0 mg/kg at RR-2 to 216 mg/kg at RR-1. pH values ranged from 4.5 to 8.7 at the 12 sampled locations.

West Parking Lot

Locations sampled in the west parking lot area (WPL-HB1 and WPL-HB2) during the Phase II RFI are illustrated on Figure 4-1 in Appendix E. Analytical results are summarized in Table 4-2 of Appendix E. Cadmium was detected at both locations at depths of 1 to 2 and 5 to 6 feet bgs. Total chromium, copper, and lead concentrations were also slightly elevated at boring location WPL-HB2 at depths of 1 to 2 and 5 to 6 feet bgs. Metals concentrations were not elevated in samples collected from depths of 9 to 10 feet bgs from both sampled locations. Hexavalent chromium was also not detected at either location.

East Parking Lot

Four locations in the east parking lot (PL-HB1 through PL-HB4) were sampled to depths of approximately 6 feet bgs during the RFI. With minor exception, metals were not detected at elevated concentrations at the four sampled locations. At location PL-HB4, copper was detected at concentrations ranging from 75 to 109 mg/kg. Maximum concentrations of 102 mg/kg nickel and 48.5 mg/kg lead were also reported at that location. Hexavalent chromium was not detected in any of the 12 samples collected from the four locations.

Relocation Sites

Six relocation site borings were advanced to characterize soils beneath locations where wastewater tanks W-1 and W-2 might be moved, if necessary, to facilitate any necessary remediation of Pond 1. Eight samples were collected for metals and pH analysis from relocation site boring RS-6, at depths ranging from 1 to 40 feet bgs. Maximum cadmium, total chromium, copper and lead concentrations in shallow samples collected at depths of 1 and 3 feet bgs were 2.0, 279, 1050, and 1590 mg/kg, respectively. In the sample collected from 1 feet bgs, a maximum nickel concentration of 536 mg/kg was detected. Elevated concentrations were generally not detected in samples collected at depths of 5.5, 10, 15, 20, 30, and 40 feet bgs. A low concentration of 2.8 mg/kg arsenic was detected in the sample collected at a depth of 20 feet bgs. As discussed below in Section 3.2.2, the sample collected from boring RS-6 at a depth of 3 feet bgs also contained the highest concentration of TCE detected in Site soils.

Soil samples to 40 feet bgs were also collected from five additional relocation site borings (RS-1 through RS-5). Cadmium, total chromium, copper, nickel, and lead concentrations in samples collected from 1 to 5 feet bgs were generally lower than concentrations in samples collected below 5 feet bgs. Cadmium was detected at depth at two locations (3.1, 1.0, and 0.60 mg/kg at depths of 15, 20, and 30 feet bgs in boring RS-2, and 8.6 mg/kg at a depth of 15 feet bgs in boring RS-3).

Hexavalent chromium was detected at a concentration of 138 mg/kg at a depth of 3 feet bgs in boring RS-4, and was generally not detected or detected at low concentrations at the remainder of the sampled locations. Low pH was observed at depths of 1, 3, 10, and 30 feet bgs at location RS-2 (pH 3.0, 3.5, 4.6, and 5.8, respectively).

Former Drum Storage Area No. 2
One shallow soil sample was collected from former drum storage area no. 2 (WMU22) in the interval from 1 to 2 feet bgs. Cadmium, total chromium, copper, nickel, and lead were detected at concentrations of 1.5, 502, 498, 35.6, and 180 mg/kg, respectively. The pH of the sample was 4.6.

3.2.2 Chlorinated VOCs

Chlorinated VOC results for shallow and deep soil samples are illustrated on Plates 2 and 3, respectively.

Pond 1 Area
Relatively low concentrations of chlorinated VOCs were detected in boring PI-1 in samples collected from depths of 3 to 36.5 feet bgs. TCE, 1,1-DCA, MC, and acetone were detected at the location of PI-1 at concentrations ranging from 6 ug/kg (TCE) to 60 ug/kg (acetone). Only one compound (2-butanone, a.k.a. MEK) was detected at a concentration of 13 ug/kg at boring location PI-4. No other chlorinated VOCs were detected at these two sampled locations.

Former Chromic Acid UST
The largest number of individual chlorinated VOCs (TCE, PCE, 1,1-DCE, 1,1,1-TCA, chloroform, etc.) was detected at the three boring locations advanced in the area of the former chromic acid UST. The highest concentrations in the area were reported for samples collected from boring SB-7, located immediately adjacent to the former UST. Elevated concentrations of TCE (4,300 ug/kg), PCE (1,200 ug/kg), and 1,1,1-TCA (2,900 ug/kg) were detected at a depth of 20 feet bgs in the boring. Chlorinated VOCs were also detected at depths of 3.5, 5, 10, 15, 30, and 40 feet bgs in the boring. Concentrations detected in borings WMU12-SB1 and WMU12-SB2 were generally lower than the concentrations detected in SB7.

Former Fuel UST
Two soil samples for chlorinated VOC analysis were also collected from boring UST-SB7 in the former fuel UST area. MC was the only chlorinated VOC detected in the samples collected from depths of 15 feet bgs (1,100 ug/kg) and 35 feet bgs (290 ug/kg) in the boring. Samples for chlorinated VOC analysis were also collected from borings UST-SB14, UST-SB15, and UST-SB18 located outside the former fuel UST area. Two to three samples were collected from each boring in the approximate

interval from 10 to 35 feet bgs. With the exception of a low concentration (150 ug/kg) of 1,2-DCA detected at a depth of 10 feet bgs at location UST-SB14, chlorinated VOCs were not detected at these locations.

Former Copper Cement Pond Area

Samples for chlorinated VOC analysis were collected from four boring locations (WMU46-SB2, WMU46-SB3, WMU46-E, and SB-8) within the former copper cement pond area. With minor exception, chlorinated VOCs were not detected at the four sampled locations. Exceptions were MC at a concentration of 28 ug/kg at location WMU46-E, MC concentrations ranging from 26 to 55 ug/kg at location SB8, and acetone at a concentration of 22 ug/kg at SB-8.

Ferric Chloride Area

Samples for chlorinated VOC analysis were collected from four shallow soil borings in the ferric chloride area (SB-4, SB-5, FeCl-SB4, and WMU18/19). Low levels of TCE ranging from 9 to 125 ug/kg were detected at all four locations. Five additional chlorinated VOCs (PCE, 1,2-DCE, MC, acetone, and 2-butanone) were also detected at low concentrations at location FeCl-SB4. Low levels of TCE (9 ug/kg) and acetone (120 ug/kg) were detected at location WMU18/19.

Spent Container Storage Area

Elevated levels of PCE (10,000 ug/kg at a depth of 1 to 2 feet bgs) and TCE (2,600 ug/kg at a depth of 2.2 feet bgs) were detected at boring location WMU20-B/HB1. Two borings were advanced at that location, with boring WMU20-B advanced during the initial RFI and boring HB1 advanced during the Phase II RFI. Boring HB1 was advanced in order to evaluate the vertical extent of PCE detected in the initial sample. Concentrations were observed to decline to low levels (206 ug/kg PCE) in the final sample collected at a depth of 5 to 6 feet bgs. Chlorinated VOCs were also detected in all six soil gas sampling locations within the SCSA.

Miscellaneous Areas

Chlorinated VOCs were detected at elevated concentrations in one area not discussed above. The soil sample collected from boring location RS-6 at a depth of three feet bgs contained the highest concentration of chlorinated VOCs detected in site soils. A concentration of 110,000 ug/kg TCE was detected at this location, with no other VOCs detected. Foundry sand (yellow orange sand and vesicular glass) and a white material (possibly lime) were noted on the boring log in the upper four feet of the boring. A hydrocarbon odor was also noted at approximately five feet bgs. The sample was collected from the depth corresponding to the highest PID reading (140 ppm) noted during field screening with a PID. Below a depth of five feet bgs, PID readings declined to the low 20s ppm and less. Based on this ancillary information, it may be inferred that the vertical extent of contamination is limited. Considering the foundry sands observed in the shallow soils and the inferred attenuation with depth, location RS-6 is not believed to be an area of concern with respect to chlorinated VOC contamination.

3.2.3 Aromatic VOCs and TEPH

BTEX compounds were analyzed using Method 8020 for all soil samples collected during the RFI for purgeable aromatic analysis. Aromatic VOC and TEPH results for shallow and deep soil borings are illustrated on Plates 4 and 5, respectively. Within the context of this discussion, it is important to note that Sanborn Maps dated 1924 and 1925 (see Appendix B) indicate that the northeastern corner of the Site was occupied by Associated Oil Company. A crude oil tank farm consisting of a large 80,000 barrel tank and two 2,000 barrel tanks was noted on the Sanborn maps. An aerial photograph dated 1928 (see Appendix B) shows dark staining possibly associated with crude oil and other petroleum hydrocarbon releases from the tank farm in this general area.

Pond 1 Area

The aromatic VOCs toluene, ethylbenzene and total xylenes were detected at a depth of 2 feet bgs in boring PI-1 at maximum concentrations of 1,300, 60, and 410 ug/kg, respectively. The toluene concentration declined to 48 ug/kg in the sample collected at a depth of three feet bgs, with no other aromatics detected in the sample. Aromatic VOCs were not detected in the sample collected from a depth of 21.5 feet bgs in boring PI-4.

Former Chromic Acid UST

Toluene was detected in boring SB-7 at concentrations ranging from 86 ug/kg (10 feet bgs) to 29 ug/kg (15 feet bgs). Ethylbenzene and total xylenes were detected in the sample collected from a depth of 20 feet bgs at concentrations of 250 and 760 ug/kg, respectively. A concentration of 2,300 mg/kg TEPH was detected at a depth of 20 feet bgs at this location. Soil samples collected during the RFI for TEPH analysis were analyzed by Method 8015M, which did not include carbon chain speciation.

Former Fuel UST

During the RFI, a total of 11 soil borings (UST-SB1 through UST-SB11) were advanced in the immediate area of the former fuel UST to maximum depths of approximately 30 to 40 feet bgs. Four hand-auger boring locations (UST-HB1 through UST-HB5) were also advanced within the tank excavation to depths ranging from 16.5 to 18 feet bgs. During the Phase II investigation, seven additional borings (UST- SB12 through UST-SB18) were advanced in the vicinity of the former fuel UST to depths ranging from 25 to 35 feet bgs.

Elevated levels of benzene, toluene, ethylbenzene, and total xylene (BTEX) were generally detected in the borings placed within and immediately adjacent to the former UST. In general, BTEX concentrations in the Phase II borings were detected less frequently and at comparably lower concentrations than the initial UST borings.

Shallow Soils

Elevated BTEX concentrations were detected at several UST boring locations. Concentrations of 2,100 ug/kg benzene, 4,000 ug/kg ethylbenzene, and 8,000 ug/kg total xylenes were detected at depths of 10 to 10.5 feet bgs at location UST-SB2.

Concentrations of 5,000 ug/kg ethylbenzene and 14,000 total xylenes were detected at a depth of 10 feet bgs at location UST-SB1. At location UST-SB4, BTEX concentrations were 2,000, 3,000, 11,000, and 27,000 ug/kg, respectively, at a depth of 10 feet bgs. Comparable BTEX concentrations were also detected at several other UST boring locations. TEPH was generally detected at concentrations ranging from the low to high 1000s ug/kg.

Deep Soils
Elevated BTEX and TEPH were detected at the four hand-auger boring locations collected within the excavation, immediately below the location of the former fuel USTs. Maximum concentrations of 5,000 ug/kg benzene (UST-HB5), 6,000 ug/kg toluene (UST-HB2), 37,000 ug/kg ethylbenzene, 310,000 total xylenes (UST-HB2), and 16,000 mg/kg TEPH (UST-HB1) were detected at these boring locations at depths ranging from 16.5 to 18 feet bgs. BTEX and TEPH concentrations were observed to generally decline with increased depth, and were generally not detected or detected at relatively low concentrations in the deepest samples collected at depths ranging from approximately 30 to 40 feet bgs. One notable exception was the detection of an elevated concentration of benzene (1,700 ug/kg) at a depth of 37 feet bgs in boring UST-SB3. Toluene, ethylbenzene, total xylenes, and TEPH were not detected in this sample.

Former Copper Cement Pond Area
Shallow Soils
Benzene was not detected in any of the shallow soil samples collected from the former copper cement pond area. Maximum detected concentrations for the other aromatic organics were 400 ug/kg toluene at SB-8 (5.5 feet bgs), and 5,100 ug/kg ethylbenzene and 14,000 ug/kg total xylenes at WMU46-SB3 (10 feet bgs). In addition, a maximum concentration of 8,500 mg/kg TEPH was detected at WMU46-A.

Deep Soils
With one minor exception (5 ug/kg at a depth of 20 feet bgs in boring WMU46-SB2), benzene was also not detected in deep soils collected from the former copper cement pond area. BTEX and TEPH concentrations were observed to generally decline with increased depth, and were generally not detected or detected at relatively low concentrations in the deepest samples collected at depths ranging from approximately 30 to 40 feet bgs.

Ferric Chloride Area
Benzene was detected at a concentration of 700 ug/kg at a depth of 15.5 feet bgs in boring SB-5 located in the ferric chloride area. Benzene was not detected in samples collected at depths of 5.5, 10.5, 35.5 and 45.5 feet bgs in the boring. A maximum concentration of toluene (360 ug/kg) was detected in boring SB-6 at a depth of 6 feet bgs. Ethylbenzene and total xylenes maximum concentrations were 70 ug/kg in boring SB-5 and 220 ug/kg in boring FeCl-SB4, with both samples collected at depths of 5.5 feet bgs.

Miscellaneous Areas

Railroad and Drainage Ditch Areas

Shallow soil samples were collected from locations DD-2 and RR-5 at depths of two feet bgs. Benzene, toluene, ethylbenzene, and total xylenes were not detected in the two samples. TEPH was detected at location DD-2 at a concentration of 5,400 mg/kg.

Relocation Site

Aromatic VOCs and TEPH were detected at elevated concentrations in two areas not discussed above. Elevated concentrations of 9,000 ug/kg ethylbenzene, 43,000 ug/kg total xylenes, and 460 mg/kg TEPH were detected at a depth of 3 feet bgs at the location of boring RS-6, a short distance west of the former chromic acid UST. TEPH was not detected in the sample collected from 20 feet bgs (aromatic VOCs were not analyzed). This was the highest reported detection for total xylenes of all locations sampled at the Site for aromatic VOC analysis. This was also the location where the highest chlorinated compound concentrations were detected.

3.2.4 PCBs

Shallow soil samples for PCB analysis were collected from several areas during the initial and Phase II RFI investigations. PCB sampling results from the initial investigation are summarized in Table 4-5, results from the Phase II investigation are summarized in Table 4-6. Both tables are provided in Appendix E.

Pond 1 Area

One PCB, aroclor 1260, was detected at a concentration of 1,100 ug/kg at a depth of 2 feet bgs in boring PI-1.

Former Chromic Acid UST

Aroclor 1260 was detected at a concentration of 1,700 ug/kg in boring SB-7 at a depth of 3.5 feet bgs.

Former Copper Cement Pond Area

PCBs were not detected in a sample collected from boring SB-8 at a depth of 5.5 feet bgs.

Ferric Chloride Area

Soil samples collected from six borings in the ferric chloride area contained the highest concentrations of PCBs of all soil samples collected at the Site. Aroclor 1260 concentrations ranged from 60 to 80,000 ug/kg, and were observed to generally decline with increased depth. Aroclor 1254 was detected in only one sample (FeCl-SB7 at a depth of 11 feet bgs) at a concentration of 100 ug/kg.

Miscellaneous Areas

Drainage Ditch Area

Aroclor 1260 was detected at two drainage ditch locations, DD-1 at a concentration of 880 ug/kg and DD-6 at a concentration of 200 ug/kg. The samples were collected from approximately 1 to 2 feet bgs.

West Parking Lot
Aroclor 1260 was detected in both parking lot borings (WPL-HB1 and WPL-HB2) and at all sampled depths. Concentrations ranged from 1,100 to 13,000 ug/kg. The concentrations were observed to decline with depth.

East Parking Lot
Aroclor 1260 was detected at a concentration of 3,000 ug/kg at a depth of 1 foot in boring PL-HB1. The concentration declined to 17 ug/kg in the sample collected from a depth of 5 to 6 feet bgs in the boring.

3.2.5 Semi-Volatile Organics

Samples for semi-volatile organics analysis were collected from a limited number of boring locations. Analytical results are summarized in Table 4-6, Appendix E. 2-methylnapthalene was detected at a concentration of 26,000 ug/kg at a depth of 5.5 feet bgs in boring SB-8 located in the former copper cement pond area. 1,2,4-trichlorobenzene was detected at a concentration of 1,200 ug/kg at a depth of 5.5 feet bgs in boring FeCl-SB4. Pyrene was detected at a concentration of 1,300 ug/kg in the interval from 1 to 2 feet bgs in boring WMU18/19, which was also located in the FeCl area. Di-n-butyl phthalate and bis (2-Ethyl-hexyl phthalate were detected at concentrations of 400 and 410 ug/kg, respectively, at boring locations DD-5 and DD-6.

3.3 Groundwater

Based on monitoring data acquired since 1985, there are basically three groundwater contaminant plumes underlying the PTI site. The plumes consist of hexavalent chromium, aromatic organics, and chlorinated solvents. The following discussion describes the occurrence and distribution of groundwater contaminants based primarily on the more recent quarterly sampling results. During preparation of this SCM, all historical groundwater quality data were input into the project's database. Tables summarizing VOCs, metals, and pH results from 1989 to the present are provided in Appendix F as Tables B-1 and B-2. Beginning in July 2001, analytical results have been provided electronically by the laboratory and input directly into the project's Access database. Historical data prior to July 2001 were input manually using historical analytical reports. Where analytical results are not indicated in Tables B-1 and B-2, either the analytical reports were not available for review and inputting or the compound was not analyzed. The historical analytical results were input into the database in order to generate the time series plots provided in Appendix F.

3.3.1 Metals

Routine quarterly groundwater monitoring at the PTI facility has generally included analysis for cadmium, hexavalent chromium, total chromium, and copper.

Hexavalent and Total Chromium
During the October 2004 sampling event, hexavalent chromium was detected in 6 of the 12 sampled wells (due to lowering water levels, wells MW-01S and MW-16 contained an insufficient amount of water and were not sampled during October

2004) and total chromium was detected in 5 of the 12 sampled wells. Well MW-4 contained the highest detected concentration of hexavalent and total chromium (3.7 and 2.5 mg/l, respectively). The concentration in well MW-04 showed a significant decline (approximate order-of-magnitude) during October 2004 compared to the previous four quarters. Hexavalent chromium concentrations during October 2004 ranged from 0.001 mg/l (MW-15D) to 2.6 mg/l (MW-14S) in the remaining sampled wells. Concentrations of total chromium in the remaining sampled wells ranged from 0.006 mg/l in well MW-6D to 1.2 mg/l in well MW-14S. Historically, the highest hexavalent and total chromium concentrations have been detected in well MW-4. The primary source of the chromium is likely the former chromic acid UST, which is located upgradient from the locations (MW-4 and MW-9) where elevated concentrations have historically been detected.

Hexavalent and total chromium concentrations and groundwater elevations in well MW-4 during the period from January 1989 to August 2004 are illustrated on the time series plots in Appendix F. Concentrations of hexavalent chromium generally decreased from July 1989 (120 mg/l) to July 1993 (1.8 mg/l), while groundwater elevations increased. From July 1993 to approximately early 2001, hexavalent chromium concentrations have fluctuated while groundwater elevations have remained fairly constant. From mid-2001 through October 2004, water levels have exhibited a generally steady decline, while hexavalent chromium concentrations have remained fairly constant.

Monitoring performed at the facility since 1985 on a generally quarterly basis has indicated that the hexavalent and total chromium plumes are not migrating off-site.

Cadmium and Copper

During the October 2004 sampling event, cadmium was detected in three wells at concentrations ranging from 0.006 (MW-14S) to 0.14 mg/l (MW-04). Cadmium has consistently been detected only in well MW-4. The time series plots also illustrate the concentrations of cadmium detected in well MW-4 and groundwater elevations during the period from January 1989 to October 2004. Cadmium concentrations have fluctuated considerably in well MW-4 throughout the monitored period.

Copper was detected at a concentration greater than the reporting limit in one well (MW-14S at a concentration of 0.031 mg/l) during the October 2004 sampling event. This concentration did not exceed the secondary MCL of 1.3 mg/l. Historically, with the exception of well MW-14S during one sampling event (October 1990), copper has not been detected in site wells at concentrations in excess of the secondary MCL.

3.3.2 Chlorinated Solvents

Chlorinated solvents detected most frequently and at elevated concentrations include TCE, 1,1-DCE, 1,1-DCA, and 1,1,1-TCA. TCE was detected in all 12 of the groundwater monitoring wells sampled during October 2004. The highest concentration of TCE (190ug/l) was detected in well MW-3 located along the northern boundary of the site, with the second highest concentration (180 ug/l) detected in well MW-11, also located along the northern boundary of the site. The TCE at locations MW-3 and MW-11 likely originated from off-site upgradient source(s). TCE was also detected at elevated concentrations at locations MW-4 (160 ug/l) and MW-14S (160 ug/l). These two wells are located downgradient of the former chromic acid UST, where elevated levels of chlorinated VOCs have been detected in subsurface soils.

Groundwater samples from selected wells (MW-1S, MW-4, MW-4A, MW-6D, MW-9, MW-11 and MW-15D) were analyzed for 1,4-dioxane during July and October 2001. The highest concentrations (130 and 140 µg/L) were detected in upgradient shallow well MW-1S during July and October 2001, respectively. The next highest concentrations were detected in MW-4 (16 and 37 ug/l) and MW-9 (18 and 75 ug/l) during July and October 2001, respectively. The concentrations of 1,4-dioxane in MW-11, located adjacent to the northern boundary of the Site, were 5.1 and 12 ug/l during July and October 2001, respectively. Concentrations in the three deep wells were less than 1 ug/l during both sampling events. A summary of 1,4-dioxane results are provided in Appendix F.

3.3.3 BTEX

During the October 2004 sampling event, low levels of aromatic organics were detected in five wells. Benzene was detected in four of the five wells at concentrations ranging from 1.3 ug/l (well MW-4 duplicate) to 0.59 ug/l (MW-15S). Ethylbenzene was detected in one well (MW-11) at a concentration of 29 ug/l.

A BTEX plume originating from off-site upgradient sources (e.g., Pilot Chemical) has frequently been observed in wells located along the northern boundary of the site during historical sampling events. The plume typically migrates towards the southwest and generally impacts wells located in the western portion of the site. The one exception is well MW-16, which was installed during the RFI specifically to monitor the area immediately downgradient of the former fuel USTs. Aromatic VOCs detected at this location likely originate from the former fuel UST area.

3.3.4 Appendix IX Parameters

Initially in December 2002, and thereafter on an annual basis (October 2003 and October 2004), four wells (MW-4, MW-7, MW-11, and MW-14S) were sampled for Appendix IX parameters (organochlorine and organophosphorus pesticides, chlorinated herbicides, polychlorinated biphenyls [PCBs], VOCs, semi-VOCs, Title 22 metals, hexavalent chromium, total cyanide, sulfide, dioxins and furans). With the exception of the parameters discussed above in Sections 3.3.1 through 3.3.4 which are part of the routine groundwater monitoring program, the remainder of the Appendix IX parameters were either not detected or were detected at relatively low concentrations (see Tables G-2 and G-3 in Appendix F) and are not believed to be COCs for the Site. Annual monitoring reports and Appendix IX sampling results are currently included in the October quarterly sampling reports as an appendix.

3.3.5 Correlation between Water Levels and Water Quality

Time series plots indicate that higher seasonal (i.e., during summer months) water levels generally resulted in lower concentrations of hexavalent chromium in shallow well MW-04. These decreases indicate that rises in water levels generally had a dilutionary affect on the dissolved constituents, as opposed to increasing dissolution of contaminants from impacted soils in the area.

Similarly, the time series plots generally indicate that higher concentrations of hexavalent chromium in shallow well MW-04 occur during seasonally lower water levels around January of each year. This trend suggests that metals concentrations are concentrated as groundwater levels drop, and diluted as levels rise.

3.4 Surface Water

Arrows depicting the direction of storm water flow during rainfall events are provided on Plate 1. The locations of storm water retention features (e.g., containment berms, collection wall, etc.) are also illustrated on Plate 1. All storm water falling within the boundaries of the site is collected and processed in the facility's wastewater treatment system.

Four surface water samples were collected in 1991 during a storm event (CDM, 1991). Three of these samples were collected from a drainage site adjacent to the Site, including one upstream, one downstream, and one near the center of the site along the drainage. Results for hexavalent chromium, total chromium, iron, and lead were all below detection limits. The downstream location had a cadmium concentration of 0.0057 mg/L. Nickel was detected at the middle and downstream locations at concentrations of 0.3 mg/L and 0.41 mg/L. Copper and zinc were detected at all locations with concentrations between 0.034 and 0.81 mg/L and 0.22 to 0.72 mg/L respectively. Laboratory measurements of pH ranged between 6.8 and 8 (CDM, 1991). Analytical results are summarized in Table 4-2, Appendix E.

A surface water sample was collected in December 2001 from an on-site stormwater sump. This sample was analyzed for pH, total suspended solids, total cyanide, oil and grease, and other constituents. Results indicated that pH was 7.60, and nominal concentrations of cyanide, ammonia, aluminum, iron, chromium, copper, and nickel were detected in the sample. The analytical report is provided in Appendix G.

3.5 Areas of Concern and Potential Constituents of Concern

Organic compounds are present in soil gas, and organic and inorganic constituents are present in soils and groundwater underlying the Site. Based on field investigation results and groundwater monitoring performed to date, several AOCs have been identified at the Site. The locations of these AOCs are illustrated on Plate 1. A tabular summary of AOCs and potential COCs is provided in Table 3-1.

Chlorinated VOCs are not naturally occurring compounds and are listed as potential COCs on the table where detected. Owing to the former fuel UST at the facility, all detections of BTEX and TEPH will also be considered potential COCs where detected.

Metals (cadmium, total chromium, copper, nickel, lead and zinc) detected in site soils at concentrations that appear to be elevated are also listed on the table. As previously discussed, although there are certain limited conditions under which hexavalent chromium may occur naturally, it is unlikely that the concentration of hexavalent chromium (60.5 mg/kg) detected at a depth of 30 feet bgs at the location of background boring BG-2 is naturally occurring. Therefore, as shown on Table 3-1, hexavalent chromium is considered a COC at any location where it is detected.

T[illegible]-1

Areas of Concern and Potential Constituents of Concern

AOC	Media	Chlorinated VOCs	BTEX and TEPH	Metals	Semi-Volatile Organics	PCBs
Pond 1 Area	Soil	MC, acetone, 2-butanone, TCE, 1,1-DCA	TEX	**Cd, Cr+6, Cr, Cu, Ni, Pb, Zn, As**		arochlor 1260
Former Chromic Acid UST	Soil	**TCE, PCE, 1,1-DCA, 1,2-DCE, 1,1,1-TCA, CFM, MC, acetone**	**TEX,TEPH**	**Cd, Cr+6, Cr, Cu, Ni, Pb, Zn, As**		arochlor 1260
Former Fuel UST Area	Soil	MC, 1,2-DCA	**BTEX, TEPH**	As		
Former Copper Cement Pond Area	Soil	MC, acetone	**TEX, TEPH**	**Cd, Cr, Cu, Ni, Pb, Zn**	2-methyl napthalene	
Ferric Chloride Area	Soil	TCE, PCE, 1,2-DCE, MC, Acetone, 2-butanone, 2,4-TCB	BTEX	**Cd, Cr, Cu, Ni, Pb, Zn, As**		arochlor 1260
Former Zinc Pond Area	Soil			**Cd, Cr, Cu, Ni, Pb, Zn, As**		
Spent Container Storage Area	Soil	**TCE, PCE**		Cd, Cr, Cu, Ni, Pb		
Miscellaneous Areas						
Railroad and Drainage Ditches	Soil		TEPH	**Cd, Cr+6, Cr, Cu, Ni, Pb, Zn**		arochlor 1260
West Parking Lot	Soil			Cd, Cr, Cu, Pb		arochlor 1260
East Parking Lot	Soil			Cr, Cu, Ni, Pb		arochlor 1260
Relocation Sites	Soil	**TCE**	**EX**	Cd, Cr+6, Cr, Cu, Ni, Pb, Zn		arochlor 1260
Former Drum Storage Area No. 2	Soil			Cd, Cr, Cu, Ni, Pb		
NW Quadrant of the Site	Soil Vapor	**VC, CA, DCM, trans-1,2-DCE, 1,1-DCA, cis-1,2-DCE, CFM, 1,1,1-TCA, TCE, PCE, Freon 11, Freon 113**	**BTEX**			
Site-Wide	Groundwater	**PCE, TCE, 1,1-DCE, 1,2-DCA, cis-1,2-DCE, CCl4, MC, CFM**	**BTEX**	**Cd, Cr+6, Cr**	1,4-dioxane	

PCE - tetrachloroethene
TCE - trichloroethene
MC - methylene chloride
Cu - copper
Cr - chromium
VC - vinyl chloride
CFM - chloroform
PCBs - polychlorinated biphenyls

1,1- and 1,2-DCE - 1,1- and 1,2-dichloroethene
2,4-TCB - 2,4-trichlorobenzene
BTEX - benzene, toluene, ethylbenzene, xylenes
TEPH - total extractable petroleum hydrocarbons
Cd - cadmium
CA - chloroethane
1,1- and 1,2-DCA - 1,1- and 1,2-dichloroethane
CVOCs - chlorinated volatile organic compounds

As - arsenic
Cr+6 - hexavalent chromium
Ni - nickel
Pb - lead
Zn - zinc
DCM - dichloromethane
CCl4 - carbon tetrachloride
1,1,1-TCA - 1,1,1-trichloroethane

Note: If an individual COC listed above is shown in Bold, then it has been determined in Section 4 to be a COC for the area and media indicated.

Section 4 Contaminant Sources and Fate and Transport

This section is organized according to the AOCs listed in Table 3-1. Within each AOC, each type of potential COC (volatile organics, metals, TEPH, etc.) for each affected media (soil gas, soil, and groundwater) is discussed. Soil gas is discussed for those AOCs where soil gas samples were collected. Groundwater is discussed from a site-wide perspective in Section 4.9.

4.1 Pond 1

Volatile organic compounds (both chlorinated and aromatic organics) and metals were detected in subsurface soils underlying Pond 1. In order to evaluate whether Pond 1 was a source for the constituents observed in soils underlying the unit, the following additional information is provided regarding the operation of Pond 1.

As discussed previously, Pond 1 was constructed in 1975 by adding 6-inches of reinforced concrete over Pond 8 and extending the walls. Pond 8 was a former wastewater treatment pond in use prior to 1972 or 1974, and was not a regulated unit. According to Kleinfelder's 1986 Environmental Assessment Report, the contents of Pond 1 varied only slightly during its 10 years of operation, and were generally maintained between pH 6 and 13. In 1985, use of the pond for direct treatment was discontinued and the pond was drained and cleaned. No visible signs of cracks, leakage, or chemical degradation were observed. The report also noted that the high pH of the pond precipitated gypsum upon the pond walls and bottom, further reinforcing the pond's seal. The pond is currently used as secondary containment for wastewater treatment tanks W-1 and W-2.

4.1.1 VOCs

Chlorinated VOCs

As described in Section 3 and shown on Plates 2 and 3, low levels (i.e., less than 100 ug/kg total chlorinated VOCs) of several chlorinated VOCs were detected in shallow and deep soils underlying the Pond 1 area. As illustrated on Plates 2 and 3, the maximum concentrations (26 ug/kg methylene chloride and 60 ug/kg acetone) were observed in the shallowest sample collected from a depth of three feet bgs. Concentrations in samples collected at depths of 7, 27, and 36.5 feet bgs were lower (i.e., maximum 14 ug/kg MC in the sample collected from a depth of 36.5 feet bgs) and were generally comparable to each other. Chlorinated VOCs were not detected in the soil gas sample collected from a depth of five feet bgs in soil gas boring SV-19 located adjacent to the southeast corner of Pond 1; however, concentrations up to 240 ug/l 1,1-DCA and 280 ug/l freon 113 were detected in the sample collected from 18 feet bgs.

Considering that only four individual chlorinated VOCs were detected at low concentrations in soils underlying Pond 1 and the 10-year period that Pond 1 was in operation, PTI believes it is unlikely that Pond 1 was the source of the chlorinated VOCs underlying Pond 1 Concentrations would be expected to be much higher and detected with greater frequency if Pond 1 were the source. No information is available for Pond 8; however, it is possible that Pond 8 (which did not include the additional six-inch thickness of reinforced concrete and extended walls) was the source of the observed low levels of contamination. An additional source of the low levels of chlorinated VOCs detected in the samples collected from depths of 27 and 36.5 feet bgs may also have been lateral migration from the former chromic acid UST area, which is a known source for VOCs, as discussed in Section 4.2 below. The soil gas detections at 18 feet bgs may also be attributable to lateral migration from the former chromic acid tank area, or adsorption of vapors that have "off-gassed" from groundwater.

As discussed above, the available data are subject to varying interpretations. If additional data are determined to be necessary in order to evaluate, select, and implement Corrective Action, those data will be collected.

Aromatic VOCs

As shown on Plates 4 and 5, aromatic VOC concentrations followed the same trend described above. The primary difference consisted of elevated levels of toluene (1,300 ug/kg) and xylenes (410 ug/kg) detected in the initial sample collected from boring PI-1 at a depth of two feet bgs (this sample was not analyzed for chlorinated VOCs, so no comparison can be made with chlorinated VOC concentrations). A low level of ethylbenzene (60 ug/kg) was also detected in the sample.

Concentrations declined significantly in the sample collected from a depth of three feet bgs (48 ug/kg toluene, and xylenes were not detected), and were comparable to the observed chlorinated VOC concentrations. The large decline in concentration indicates that the source was relatively minor. Deeper soil samples underlying Pond 1 were not submitted for aromatic VOC analysis; however, aromatic VOCs were not detected in the sample collected at a depth of 21.5 feet bgs from boring PI-4, located approximately 15 feet north of Pond 1.

For the reasons discussed above regarding chlorinated VOCs, Pond 1 is not believed by PTI to be a source of aromatic VOCs to the subsurface environment. There are a variety of historical activities that may have resulted in the aromatic VOC and TEPH contamination observed at the Site. As shown on Plate 1, foundry sands are extensive in shallow soils in the northern portion of the facility, north of the east-west road. In addition, large-scale historical bulk oil storage operations were ongoing in the immediate vicinity of the Site for a minimal 25-year period (from approximately the early 1920s to the late 1940s). As discussed above, the available data are subject to varying interpretations If additional data are determined to be necessary in order to evaluate, select, and implement Corrective Action, those data will be collected.

4.1.2 Metals

All seven metals COCs (arsenic, cadmium, chromium, hexavalent chromium, copper, nickel, lead, and zinc) were observed at elevated concentrations in both shallow and deep soils underlying Pond 1 see Plates 6 and 7) Several sources are possible for the observed contamination, in particular Pond 1 or its predecessor, considering its use for primary wastewater treatment during an approximate 10-year period. As discussed above, the observed contamination may have resulted from operation of the prior wastewater treatment pond (Pond 8) In addition, Pond 1 is located within the portion of the facility where foundry sands were observed in shallow soils at a large number of the soil boring locations (see Plate 1). It is not possible to distinguish whether the observed shallow metals contamination resulted from leaks from the wastewater treatment pond, or were derived from the foundry sands. The high pH observed in shallow soils underlying the pond indicates that wastewater treatment may have contributed to the observed contamination.

The 1986 Environmental Assessment evaluated chromium and pH values in soils underlying Pond 1 and concluded that Pond 1 was not the source. This determination was based on chromium concentrations which generally increased with depth, and pH values which also generally decreased with increased depth. The report concluded that lateral migration from the former chromic acid UST through the permeable soils of the unsaturated Gage aquifer (at approximate depths of 15 to 30 feet bgs) was the likely source. The pH of the former chromic acid UST was in the range of 1 to 3, whereas the pH of Pond 1 was maintained between 6 and 12. Samples with low pH values, therefore, may be traced back to the former chromic acid UST and not Pond 1.

The same decreasing pH trend was generally observed in many of the subsurface soil samples collected during the RFI investigation, lending support to the concept for lateral migration from the former chromic acid UST area. With regard to metals concentrations, however, there is no clear correlation between concentrations and depth. In general, shallow soils underlying Pond 1 have higher metals concentrations than deeper soils. In several instances, elevated metals concentrations were observed in the unsaturated Gage aquifer soils that also correlated to low pH. The lack of an observed trend would appear to indicate multiple sources may exist for the metals contamination observed below Pond 1. Foundry sands containing elevated metals were observed in shallow samples collected from many locations north of the east-west road. Given the location of Pond 1 north of the road, it is reasonable to assume that foundry sands were also present in this area.

In summary, metals contamination beneath Pond 1 is attributable to several possible sources: foundry sands, lateral migration from the former chromic acid UST area, and former Pond 8 While Pond 1 cannot be ruled out as a possible source, for the reasons stated above Pond 8 is believed to be a more likely source than Pond 1. Because Pond 1 can not be ruled out as a possible source, Table 3-1 indicates (by bold type) that Pond 1 may be a source of metals contamination to the subsurface.

4.2 Former Chromic Acid UST

VOCs and metals were detected in soils underlying the former chromic acid UST.

4.2.1 VOCs

Chlorinated VOCs

As previously discussed, an extensive subsurface soil investigation was performed in the area of the former chromic acid UST during the mid 1980s. RFI profile boring SB-7 was located immediately adjacent to the former UST. Seven samples for VOC analysis were collected from the boring at depths ranging from 3.5 to 40 feet bgs. Samples collected from the boring, therefore, provide a good indication of the vertical distribution of chlorinated VOCs in subsurface soils underlying the former chromic acid UST.

Seven individual chlorinated VOCs were detected in the soil samples collected from boring SB-7. The highest concentrations were detected in samples collected from depths of 3.5 feet bgs (silt) and 20 feet bgs (sand). Comparatively lower concentrations were detected in the samples collected from depths of 30 and 40 feet bgs. The lithologic materials in these deeper samples consisted of a combination of sandy silt, silty sand, and silty clay.

Based on number of individual detected chlorinated VOCs and elevated levels observed in the subsurface at location SB-7, the former chromic acid UST is considered to be a potential source of chlorinated VOC contamination. The subsurface lithology (sand in the approximate interval from 20 to 31 feet bgs with a minimum 10-feet thick underlying silty clay) at the location also favors the lateral transport of contaminants.

Aromatic VOCs

A limited number of samples from boring SB-7 were submitted for aromatic VOC analysis (10, 15 and 20 feet bgs). Samples were not collected for aromatic VOC analysis at depths shallower than 10 feet bgs. Comparable to chlorinated VOCs, the highest concentration was detected in the sample collected from a depth of 20 feet bgs. The aromatic VOC contamination appears to correlate to chlorinated VOCS, and indicates that the former chromic acid UST may also have been a source of aromatic VOC contamination.

4.2.2 Metals

High metals concentrations were detected in all samples collected from boring SB-7 located adjacent to the former chromic acid UST. In addition, low pH values were reported for all samples with the exception of the shallowest (3 feet bgs) and the deepest samples (40.5 feet bgs) These findings indicate that the former UST was a probable source of the observed metals contamination. As previously discussed, contamination originating from the former UST likely migrated laterally to the Pond 1 area.

4.3 Former Fuel UST

4.3.1 VOCs

Chlorinated VOCs

Several UST boring locations in areas surrounding the former fuel UST were sampled for chlorinated VOCs. With one exception, chlorinated VOCs were either detected at relatively low concentrations (e g , 150 ug/kg 1,2-DCA at a depth of 10 feet bgs in boring UST-SB14) or were not detected. The exception was boring UST-SB7, which was a slant boring to the northwest. MC was detected in the boring at concentrations of 1,100 and 290 ug/kg at depths of 15 and 35 feet bgs, respectively. MC was detected in the majority of the samples collected from boring SB-7 which was located northwest of the former fuel UST and adjacent to the former chromic acid UST. There is no information to suggest that chlorinated organics were stored in the fuel USTs. The former fuel USTs, therefore, are not believed to be a source of chlorinated VOC contamination.

Aromatic VOCs and TEPH

Elevated levels of aromatic VOCS (all four BTEX constituents) and TEPH were detected in the former fuel UST area. The highest concentrations were generally observed in both shallow soils and in the permeable sediments of the unsaturated Gage aquifer. Relatively low concentrations or non-detects were generally observed in the deepest samples collected from the aquitard underlying the Gage aquifer. The former fuel UST is believed to be the primary source for the observed contamination. As was observed in the former chromic acid UST area, the contamination appears to have migrated laterally through the Gage.

Metals

Analysis for metals was not performed on any of the samples collected from the UST soil borings, with the exception of slant boring UST-SB7. Three samples were collected for chromium and arsenic analysis, and the arsenic concentration in the deepest sample collected from 40.5 feet bgs slightly exceeded the on-site average concentration. Because of the depth of the sample, arsenic is not believed to be a COC in the former fuel UST area. There is also no information to indicate that the former fuel UST area was a source of metals contamination.

4.4 Former Copper Cement Pond Area

4.4.1 VOCs and Semi-VOCs

Chlorinated VOCs

Five borings in the former copper cement pond area were analyzed for chlorinated organics. At all sampled locations, chlorinated organics were either not detected or were detected at relatively low concentrations (i e , less than 100 ug/kg). Methylene chloride and acetone, which are common laboratory contaminants, were the only chlorinated VOCs detected. The former copper cement pond area, therefore, is not believed to be a source of chlorinated VOC contamination.

Aromatic VOCs and TEPH

Aromatic VOCs (with the exception of benzene) and TEPH were generally detected at elevated concentrations throughout the former copper cement pond area. Based on the elevated concentrations and number of detections, the area is believed to be a source of aromatic VOC and TEPH contamination. Based on the vertical distribution of contaminants which shows a general concentration increase in the permeable sediments of the unsaturated Gage aquifer, it appears that the former fuel USTs also contributed to the observed contamination in this area. Concentrations generally declined in samples collected from the underlying aquitard.

An unknown third source (possibly from the nearby historical oil fields or above ground bulk oil storage tanks) is also indicated based on review of the boring log for WMU46-SB2. At this location, silty clay was observed in three samples collected to a depth of 10 feet bgs. A black, tarry, oily sand saturated with product was observed just below the silty clay at an approximate depth of 11 feet bgs. The depth of saturation is higher than expected if the former fuel UST were the source. In addition, saturation was not observed in borings located closer to the former fuel UST, lending support to the possibility of an unknown third source.

The semi-VOC 2-methylnaphthalene was detected at a concentration of 26,000 ug/kg at a depth of 5.5 feet bgs in boring SB-8. No other semi-VOCs were detected in the sample, and the source of this contamination is unknown.

4.4.2 Metals

Metals (with the exception of hexavalent chromium, which was detected below the prediction limit and arsenic which was not analyzed) were detected at elevated concentrations throughout the former copper cement pond area. The area, therefore, is believed to be a source of metals contamination. Concentrations detected in shallow soils to depths of approximately 5 and 6 feet bgs were generally much higher than concentrations detected in deeper samples. The ponds were relatively shallow and did not extend more than a foot or two below grade. Based on evaluation of the results and vertical distribution and the at-grade to slightly below grade construction of the ponds, the contamination appears to be primarily limited to the finer-grained shallow sediments of the Bellflower aquitard.

4.5 Ferric Chloride Area

4.5.1 VOCs

Chlorinated VOCs

Several shallow soil borings in the ferric chloride area were analyzed for chlorinated VOCs. TCE was detected at all sampled locations, with relatively low levels (maximum 110 ug/kg TCE at 5.5 feet bgs) of six individual chlorinated VOCS detected at the location of boring FeCl-SB4. With the exception of a low concentration of MC (8 ug/kg), chlorinated VOCs were not detected in the final sample collected at a depth of 11 feet bgs at that location. As discussed previously, shallow soils in the area were mixed with lime years ago in preparation for proposed redevelopment. As indicated on the boring logs, lime was observed at most of the boring locations advanced in the ferric chloride area. Shallow soils throughout the area have been disturbed and it is possible that soils were imported from other areas. Based on the low concentrations detected in the shallow soils and absence of any activities which may have used chlorinated solvents in this area, the area does not appear to be a source of chlorinated VOC contamination.

Aromatic VOCs

Aromatic VOCs were detected at slightly higher concentrations than the chlorinated VOCs discussed above. Based on the distribution and concentrations of the contaminants, the area does not appear to be a source of aromatic VOC contamination.

4.5.2 Metals

Elevated metals (with the exception of hexavalent chromium which was not detected above its prediction limit) were detected at the majority of the locations sampled within the ferric chloride area. Concentrations were generally more elevated in shallow soils, however, elevated concentrations were also observed in deep samples. Based on the lateral and vertical distribution of the various metals, and low pH values observed to the maximum sampled depth, the area is believed to be a potential source area for the observed metals contamination.

4.5.3 PCBs

PCBs were analyzed at five soil boring locations in the ferric chloride area. One PCB (aroclor 1260) was consistently detected at all locations at elevated concentrations. Concentrations generally were most elevated in shallow samples collected at depths of 1 to 5 feet bgs, and declined rapidly with depth. Based on the lateral extent and elevated concentrations, the ferric chloride area is a probable source area for the observed PCB contamination. There is no evidence that PTI ever used PCBs at the Site. Therefore, the detected PCBs are likely associated with historical activities in the area, and are not believed to be associated with current or historical chemical facility activities. As indicated on the 1924 and 1925 Sanborn Maps, the ferric chloride area bordered the former Pacific Electric Railway Company right-of-way, and a Pacific Electric Railway Company substation was located to the west of the ferric chloride area.

In order to evaluate the potential threat to groundwater from PCBs detected in shallow soils in the ferric chloride area (which was disturbed to an approximate depth of 8 to 10 feet bgs), a groundwater sample for PCB analysis will be collected from well MW15S during the July 2004 quarterly sampling event. Well MW15S is located directly downgradient of the ferric chloride area. The result will be included and discussed in the July 2004 quarterly sampling report.

4.6 Former Zinc Pond Area

High concentrations of metals (arsenic, cadmium, chromium, copper, nickel, lead, and zinc) were detected in shallow soils to depths of 10 feet bgs at the location of boring SB-2. The highest reported metal concentration was zinc, which was detected at 30,800 mg/kg in the sample collected at a depth of 1 foot bgs. Concentrations were observed to decline orders of magnitude in samples collected from 15 to 40.5 feet bgs. Based on the high surficial concentrations, notably zinc, the former zinc pond area is a probable source for the observed metals contamination. The higher concentrations are generally limited to the shallow relatively fine-grained soils of the Bellflower aquitard, and do not appear to have migrated to the underlying coarser-grained unsaturated Gage aquifer.

4.7 Spent Container Storage Area (SCSA)

4.7.1 VOCs

Elevated levels of PCE (10,000 ug/kg at a depth of 1 to 2 feet bgs) and TCE (2,600 ug/kg at a depth of 2.2 feet bgs) were detected at one of the two shallow boring locations within the SCSA (WMU20-B/HB1). Concentrations were observed to decline to low levels (206 ug/kg PCE and TCE was not detected) in the final sample collected at a depth of 5 to 6 feet bgs. Chlorinated VOCs were detected in all six soil gas sampling locations within the SCSA. Based on the use of the area for storage of spent containers and detections of chlorinated VOCs in both soil and soil gas samples collected within the area, the SCSA is believed to be a possible source area for chlorinated VOCs. Additional investigation west and south of this area has been recommended as part of a proposed Phase II soil gas investigation.

4.7.2 Metals

Elevated metals (cadmium, chromium, copper, nickel and lead) were detected in two shallow soil samples collected from the SCSA. Given the location of the SCSA in the northern portion of the Site where foundry sands were generally detected, the elevated metals be attributable to the foundry sands. Lithologic logs were not prepared for the two shallow borings; therefore, the presence of foundry sands at those locations could not be confirmed. Based on the limited data, it is not possible to determine whether the area is a possible source for the observed metals contamination.

4.8 Miscellaneous Areas

4.8.1 Railroad and Drainage Ditches

TEPH

An elevated concentration of TEPH (5,400 mg/kg) was detected in the interval from 1 to 2 feet bgs at the location of shallow boring DD-2 (northern drainage ditch). There are insufficient data to determine whether the drainage ditch is a source of the detected TEPH contamination. Given the nature of the drainage ditch and track areas, it is possible that the shallow observed contamination originated from an off-site source(s).

Metals

Elevated metals concentrations were detected in shallow soil samples collected from 12 locations in the north and south drainage ditches, and from the railroad track area. As discussed in Section 5 of the Current Conditions Report, numerous discharges were noted along the railroad tracks south of rainwater tank 3. The drainage ditch and railroad track areas, therefore, are likely sources of the observed contamination.

PCBs

One PCB (aroclor 1260) was detected at low concentrations (maximum 880 ug/kg) in shallow soils at two drainage ditch locations (DD-1 and DD-6). As previously discussed, historical activities in the area are a possible source for the observed contamination.

4.8.2 West Parking Lot

Metals

Four metals (cadmium, chromium, copper, and lead) were detected at slightly elevated concentrations in shallow samples (1 to 2 and 5 to 6 feet bgs) from two sampled locations in the west parking lot area. Based on the relatively low concentrations and lack of exceedences in samples collected in the interval from 9 to 10 feet bgs, the area is not believed to be a source for metals contamination.

PCBs

One PCB (aroclor 1260) was detected at elevated concentrations at both locations and all sampled depths, however, concentrations also declined rapidly with depth. As previously discussed, the detected PCBs are likely associated with historical activities in the area, and are not believed to be associated with current or historical chemical facility activities.

4.8.3 East Parking Lot

Metals

Four metals (chromium, copper, nickel and lead) were detected at slightly elevated concentrations in samples collected from the east parking lot. Copper, at a maximum concentration of 170 mg/kg, was detected at the highest concentration in a sample collected from 0.5 to 1 feet bgs at location PL-HB1. Copper declined to below its prediction limit in the two subsequent samples (3 to 4, and 5 to 6 feet bgs) collected at that location. Based on the relatively low concentrations, the east parking lot is not believed to be a source of metals contamination.

PCBs

One PCB (aroclor 1260) was detected at an elevated concentration (3,000 ug/kg) at a depth of 0.5 to 1 feet bgs at the location of shallow boring PL-HB1. The concentration declined to 17 ug/kg in the sample collected from 5 to 6 feet bgs. As discussed previously, detected PCBs are likely associated with historical activities in the area, and are not believed to be associated with current or historical chemical facility activities.

4.8.4 Relocation Site

VOCs

As previously discussed, the soil sample collected from boring RS-6 at a depth of three feet bgs contained the highest concentration of chlorinated VOCs detected in site soils. A concentration of 110,000 ug/kg TCE was detected at this location, with no other chlorinated VOCs detected. Elevated concentrations of 9,000 ug/kg ethylbenzene and 43,000 ug/kg total xylenes were also detected in the sample. This was the highest reported detection for total xylenes of all locations sampled at the Site for aromatic VOC analysis.

Foundry sand (yellow orange sand and vesicular glass) and a white material possibly lime, were noted on the boring log in the upper four feet of the boring. The boring was located just north of the wastewater treatment area and a short distance west of the former chromic acid UST area. Foundry sands at that location indicate that historical pre-chemical company activities may be a possible source for the observed contamination. Due to the elevated levels, however, the location is considered to be a possible source area for VOC contamination.

Metals

As previously discussed, elevated concentrations were detected primarily in the shallow samples collected. Foundry sands were also observed in shallow soils at five of the six boring locations. Metals results for deeper samples were generally not elevated, therefore, the relocation sites are not believed to be a source area for metals.

4.8.5 Former Drum Storage Area No. 2

There is insufficient information to determine whether former drum storage area no. 2 (WMU-22) is a source area for metals.

4.9 Groundwater

Areas believed to be soil contamination source areas are discussed below to evaluate whether the impacted areas are likely (or possibly) contributing to observed groundwater contamination, or have the potential to negatively impact groundwater in the future.

4.9.1 VOCs

As discussed previously in Section 1.7, numerous off-site sources of VOC contamination exist in the area. Toluene, ethylbenzene, and xylene contamination was observed in both soil and groundwater at the Pilot facility located approximately 0.1 miles north of PTI. Chlorinated compounds in soil and groundwater have also been documented for the Techni Braze, Inc. facility located 0.2 miles north-northeast of the Site. Based on evaluation of the historical and recent water quality sampling results for wells MW-1S, MW-1D, and MW-11, it is apparent that an unknown, but likely significant, portion of the chlorinated and aromatic VOC contamination observed in groundwater underlying the Site has been derived from off-Site source areas.

As shown in bold on Table 3-1, the following AOCs are believed to be source areas for VOCs in Site soils: the former chromic acid UST, the former fuel UST, the SCSA, and relocation site RS-6. Of these four locations, the former chromic acid UST and the former fuel UST are believed to be source areas for groundwater VOC contamination due to the depth of observed VOC contamination. VOC contamination observed at relocation site RS-6 and the SCSA appears to be relatively shallow, therefore, these two areas are not believed to be source areas, nor are they likely to be source areas in the future.

4.9.2 Metals

As shown in bold on Table 3-1, seven AOCs are believed to be source areas for metals in Site soils. As also indicated on the table, the three metals COCs for groundwater underlying the Site are hexavalent chromium, total chromium, and cadmium. The remaining four metals (i.e., copper, nickel, lead, and zinc) detected in Site soils have generally been detected at low concentrations in groundwater underlying the Site, and are not believed to be groundwater COCs.

The former chromic acid UST is believed to be a source for groundwater metals COCs due to the depth of the observed contamination. In addition, the Pond 1 area (Pond 1 or its predecessor Pond 8) is also believed to be a possible source area for metals COCs in groundwater. As previously discussed, time series plots of cadmium, total chromium, and hexavalent chromium provided in Appendix F illustrate changing concentrations through time at the majority of the sampled well locations. Elevated levels of cadmium, total chromium, and hexavalent chromium at well MW-4 located downgradient from both the former chromic acid UST and Pond 1 area indicate that these locations are sources of groundwater contamination.

It is not known whether the other AOCs believed to be source areas for metals contamination in Site soils (i.e., former copper cement pond area, ferric chloride area, former zinc pond area, railroad and drainage ditch areas, and the relocation sites) are source areas for the observed groundwater contamination.

4.9.3 1,4-Dioxane

As previously discussed, the highest concentration of 1,4-dioxane was detected in the groundwater at the location of upgradient well MW-1. Based on limited information, the Site is not believed to be a source area for this compound.

4.10 Fate and Transport of COCs

Stormwater infiltration is one of the primary mechanisms to facilitate the transport of contaminants vertically and laterally. As discussed, the Site is currently fully paved (with the exception of the railroad spur) and all stormwater is collected and treated in the Site wastewater treatment system. Because the Site is paved and stormwater falling within Site boundaries is contained and treated, this driving mechanism is not believed to be a concern at the Site. Rock ballast and gravel at the surface along the railroad spur allow for lateral and vertical migration during storm events. The area is relatively small, Site runoff no longer flows into this area, and there have not been any releases to the area for many years, according to the facility manager. These factors likely minimize future negative impacts to the subsurface in that area.

Coarser-grained materials were observed in the Bellflower aquitard at the locations of the former chromic acid UST area, the former fuel UST, and the Pond 1 area (see Plate 1). These three AOCs coincide with locations where elevated concentrations of COCs were observed in the unsaturated Gage aquifer. The coarser-grained shallow soils at these locations provide a mechanism for the vertical transport of contaminants from shallow to deeper soils. The boring logs adjacent to the former fuel UST indicate that native materials in the upper 10 feet consisted primarily of clays and silty clays. More permeable materials were likely placed under and around the USTs during installation. Leaks from the former fuel USTs likely traveled through the backfill and migrated laterally and vertically through the unsaturated Gage aquifer. Following removal of the USTs in 1989, the approximately 12 to 15 feet deep excavation was reportedly backfilled with clean fill dirt. As previously discussed, the area was paved following removal of the USTs.

The coarser-grained and more permeable sediments of the unsaturated Gage aquifer allow for transport of contaminants both vertically and laterally, particularly in the event that the unsaturated Gage aquifer becomes saturated. The Gage aquifer underlying the Site has been monitored for saturation since well MW-6A was installed in 1985. Since that time, saturation has not been observed at that location. Well MW-6A is located along the southern boundary of the Site, and is the only well that monitors the Gage aquifer. It is possible that the Gage aquifer could become saturated in other areas of the Site or areas upgradient of the Site, and there could be a delayed response at MW-6A due to its location at the Site's southern (and assumed downgradient) boundary. Additional Gage aquifer monitoring, therefore, has been proposed for the Site and will likely be implemented in the near future.

The aquitard underlying the unsaturated Gage aquifer is relatively thick (generally a minimum of 20 to 30 feet) and laterally continuous (see Figures 2-1 and 2-2) under the Site. The aquitard appears to thin in the southwestern portion of the Site, and also appears to be interbedded with coarser-grained materials in this area. Based on historical and recent detections of cadmium, hexavalent chromium, and total chromium in groundwater underlying the Site, it appears that these metals have migrated around or through the aquitard underlying the Gage aquifer and into the underlying Hollydale aquifer. Vertical migration to the underlying Jefferson aquifer, and lateral migration to off-site areas in the future; therefore, are both possible. Historical monitoring data indicate that the metals groundwater plume has not migrated off-site. Occurrences of these metals have generally stayed localized near the likely source areas.

Several wells are key to evaluating the transport of contaminants downgradient of the source areas. Shallow well MW-15S provides information on cadmium, hexavalent chromium, and total chromium migration at the downgradient boundary of the Site. Well MW-4A provides a monitoring point for the lower Hollydale aquifer adjacent to Pond 1, and well MW-15D monitors the merged lower Hollydale/Jefferson aquifer at the downgradient boundary of the Site. Well MW-16 monitors the upper Hollydale aquifer immediately downgradient of the former fuel UST area.

Hexavalent and total chromium concentrations in well MW-4A indicate that these COCs have either not been detected in the well, or have been detected at low concentrations. Due to use of a different analytical method, low levels of hexavalent chromium (ranging from 5.2 to 7.7 ug/l) have been detected in the well since April 2001. Cadmium has not been detected in the well since 1992. These data indicate that there is some degree of hydraulic separation between the upper and lower Hollydale aquifers, since concentrations in the upper Hollydale at that location (well MW-4) are many orders of magnitude higher (e.g., 290 ug/l cadmium, 16,000 ug/l total chromium, and 14,000 ug/l hexavalent chromium during the April 2003 sampling event) than the lower Hollydale.

Cadmium and total chromium concentrations at the location of well MW-15S have generally been non-detect throughout the monitoring period. Recent low level detections of hexavalent chromium (ranging from 3.5 to 10 ug/l) are also a function of the different analytical method and lower detection limits in use since April 2001. Recent low level detections of hexavalent chromium at MW-16 are also likely a function of the different analytical method and lower detection limits. Both total and hexavalent chromium concentrations at that location spiked in January 2002 (110 and 96 ug/l, respectively), however, the increase appears to be anomalous as concentrations prior to and after the spike were generally below or close to the detection limits. During the 2004 quarterly sampling events, hexavalent chromium concentrations in MW-16 were non-detect (at a detection limit of 1 ug/l) during April and July, with a concentration of 2.6 ug/l detected during the January sampling event. Due to an insufficient volume of water, the well was not sampled during October 2004.

Cadmium, hexavalent chromium, and total chromium concentrations in well MW-15D, which monitors the merged lower Hollydale/Jefferson aquifer, have also generally been non-detect during the monitoring period. Hexavalent chromium detections since July 2001 have also been a function of different analytical method and lower detection limits. Concentrations in well MW-15D since July 2001 have ranged from non-detect (at detection limits of 1 and 2 ug/l) to 8.1 ug/l. During the quarterly sampling events in 2004, hexavalent chromium concentrations ranged from 7 ug/l in April 2004 to 1 ug/l (at the detection limit) in October 2004.

Significant increases in total and hexavalent chromium concentrations in well MW-16 were observed during the January 2002 sampling event (110 mg/L and 96 mg/L, respectively). During subsequent sampling events at MW16, total and hexavalent chromium were either below detection or were detected at relatively low concentrations. In order to evaluate whether a slug of contaminated groundwater passed through location MW-16 following the January 2002 sampling event, total and hexavalent chromium concentrations were evaluated at downgradient well MW-7. From January 2002 through the most recent sampling event (April 2004), total and hexavalent chromium concentrations at MW-7 have remained below detection or at relatively low levels (see Table B-2, Appendix B). Well MW13, located directly upgradient from MW-16, is no longer included in quarterly sampling. Therefore, it was not possible to include an evaluation of water quality directly directly upgradient of well MW-16.

With minor exceptions (the most recent consisting of a detection of 1.2 ug/L hexavalent chromium during July 2003), total and hexavalent chromium have not generally been detected in well MW-11. This well is located along the northern boundary of the Site, and would be indicative of contaminants migrating from properties to the northeast. Hexavalent chromium was detected in the Site's shallow background well (MW-1S) at concentrations of 6.2, 1.8, and 1.3 ug/L during October 2001, July 2002, and July 2004, indicating that it is present sporadically and at relatively low concentrations in the regional groundwater plume. Based on review of these water quality data, the January 2002 increase at MW-16 is considered anomalous.

With respect to the migration of aromatic VOCs from the former fuel UST area, elevated concentrations were detected in 1993 and 1994 in well MW-16. Since 1994, an approximate 10-year period, concentrations have generally been low to non-detect. The elevated detections in 1993 and 1994 appear to be related to high water levels which reached their peak in 1995. In the event that water levels rise and approach 1993 to 1995 levels, it is likely that aromatic VOCs will be mobilized from the unsaturated zone.

It should be noted that toluene, ethylbenzene, and xylene concentrations in well MW-9 also exhibited large peaks during the period from 1992 to 1995. For example, in July 1994, concentrations were 56,000, 15,000, and 40,000 ug/l, respectively, in well MW-9. By comparison, concentrations in MW-16 during July 1994 were non detect (at a detection limit of 50 ug/l), 1,300, and 730 ug/l, respectively. The concentrations observed at MW-9 were also much higher than concentrations observed at well MW-11, which has typically been used to monitor VOCs migrating onto the Site from facilities directly north of PTI. Since October 2001, aromatic VOCs have generally been non-detect at location MW-9. The source of the 1992 to 1995 elevated concentrations is unknown. This location should be closely monitored in the event that future water levels approach the levels observed during 1992 to 1995.

Chlorinated VOC concentrations in wells MW-4 and MW-9 have remained elevated throughout the monitoring period in comparison to upgradient well MW-1S. Elevated concentrations have also been observed in well MW-11 throughout the monitoring period. Due to known chlorinated VOC contamination both regionally and from facilities directly north and upgradient of PTI, it is not possible to evaluate the migration of chlorinated VOCs associated with known or probable on-Site source areas.

Appendix A
Closure Plan Figure and Tables

Table CP-1
FACILITY WASTE STREAM DESCRIPTION

PTI Waste Type Identifier	Waste Stream	EPA Waste Codes	California Waste Codes	Hazardous Properties	Physical State	Color	pH
A	Copper Sulfate Crystal	D002; D004, D006, D007, D008,	141, 171, 172, 181	Corrosive and Toxic	Solid w/some liquids	Blue	N/A
B	Copper Sulfate Solution	D002; D004, D006, D007, D008,	132, 135, 141, 791, 792	Corrosive and Toxic	Liquid	Blue	< 6
C	Cupric Chloride Etchant	D002; D004, D006, D007, D008,	132, 135, 141, 791, 792	Corrosive and Toxic	Liquid	Dark Green	< 6
D	F006 Sludge Sludge with Nickel and/or Copper	D002; F006, D004, D006, D007, D008,	132, 135, 162, 171, 172, 181, 421, 491	Corrosive and Toxic	Solid w/some liquids	Dark Green for Nickel to Dark Blue for Copper	> 6
E	Nitric Acid Copper Rack Strip	D002; D004, D006, D007, D008,	132, 135, 141, 726, 791, 792	Corrosive and Toxic	Liquid	Dark Blue	< 6
F	Solder Tin Stripper	D002; D004, D006, D007, D008,	132, 135, 141, 792	Corrosive and Toxic	Liquid	N/A	< 6
G	Nickel Plating Solution or Nitric Acid Nickel Rack Strip	D002; D004, D006, D007, D008,	132, 135, 141, 726, 791, 792	Corrosive and Toxic	Liquid	Dark Green	< 6
H	Ferric Chloride Solution	D002; D004, D006, D007, D008,	132, 135, 141, 791, 792	Corrosive and Toxic	Liquid	Brown	< 6
IA	Miscellaneous Inorganic Acid	D002; D004, D006, D007, D008,	123, 132, 135, 141, 791, 792	Corrosive or Corrosive and Toxic	Liquid	N/A	< 7
IB	Miscellaneous Inorganic Base	D002; D004, D006, D007, D008,	121, 122, 123, 132, 135, 141	Corrosive or Corrosive and Toxic	Liquid	N/A	> 7
J	Spent Alkaline Copper Etchant	D002; D004, D006, D007, D008,	121, 123, 141, 132, 135	Corrosive and Toxic	Liquid	Dark Blue	> 7
K	Alk-Cu-Strip Copper Etchant	D002; D004, D006, D007, D008,	121, 123, 141, 132, 135	Corrosive and Toxic	Liquid	Dark Blue	> 7

1. *EPA Code D002 is primary waste code for all wastes; the additional waste codes may be attached to the waste stream by the generator for LDR or other purposes*
2. D002 - Corrosivity; D004 - Arsenic; D006 - Cadmium; D007 - Chromium; D008 - Lead; F006 - Wastewater treatment sludges from electroplating operations (see 22 CCR 66261.31(a) for electroplating operations that are exceptions to this waste code)

Table CP-3
WASTE MANAGEMENT UNITS AND MAXIMUM INVENTORY

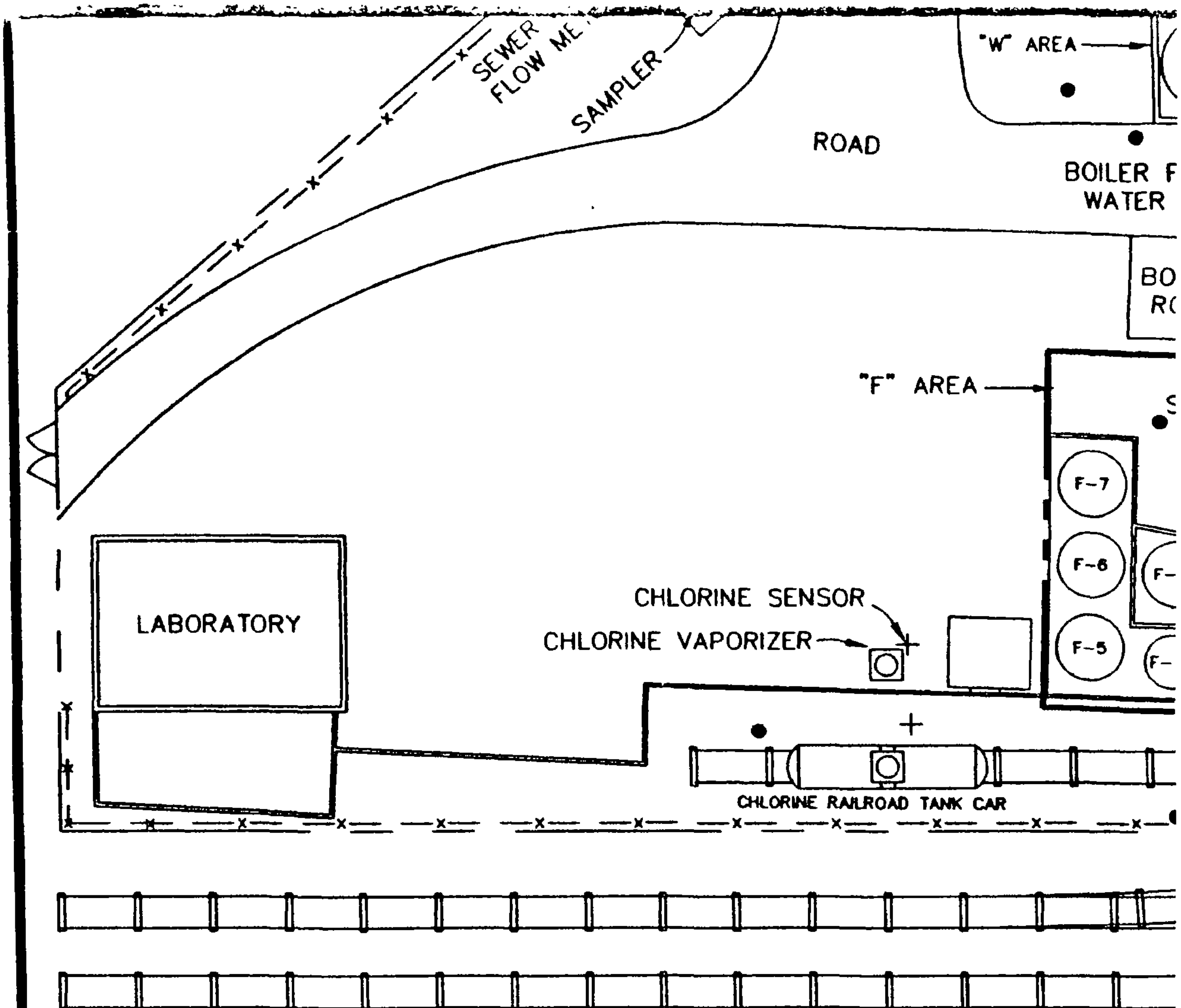
Tank No.	Waste Stream(s)	Other Uses	Material of Constructio	Dimensions: Thickness (in.) (Note 2)	Dimensions: Diam. (ft.)	Dimensions: Height (ft.)	Maximum Volume (gal.)	Tank Features
C Area								
C-1A	C, J (Reactor)		FRP	.384 .309 .248	10	15	8,800	M, R-LI
C-1B	C, J (and CuOxide Product)		FRP		10	14	8,700	M, R-LI
C-1C	C, J (Reactor)		FRP		10	15	8,800	M, R-LI
C-1D	C, J (Reactor)		Titanium		9	23	10,900	M, R-LI
C-5	C		FRP	.492/.416/.370	10	16	9,300	UT-LI
C-6	C		FRP	.492/.416/.370	10	16	9,300	UT-LI
C-7	C		FRP	.492/.416/.370	10	16	9,300	UT-LI
C-8	J, K		FRP	.389/.288/.248	12	19	15,228	UT-LI
C-9	J, K		FRP	.389/.288/.249	12	19	15,228	UT-LI
S Area								
S-1A	B (Reactor)		FRP	.375 minimum	11	10.5	7,000	M, R-LI
S-1B	B (Reactor)		FRP	.368/.328	11	10.5	7,500	M, R-LI
S-3	B		FRP	0.5/0.375	11.5	15.083	12,690	UT-LI
S-5	B		FRP	.368/.288/.248	10	16	9,300	UT-LI
F Area								
F-1	H		FRP	.389/.309/.248	10	17.25	10,575	UT-LI
F-2A	H (Reactor)		FRP	0.3600	12	13.25	11,200	R-LI
J Area								
J-2	C (Reactor)		FRP	.368/.248	8	13	4,500	M, UT-LI
J-3	All except J, H		FRP	.246/.226	10	14	8,225	M, UT-LI
J-4	All except J, H		FRP	.246/.226	10	14	8,225	UT-LI
W Area								
W-1	Any Wastewater (Reactor) (Note 3)		FRP	~.375	18	15.5	30,457	M, UT-LI
W-2	Any Wastewater (Reactor) (Note 3)		FRP	.375 (min.)	18	15.5	30,457	M, UT-LI
				Total Tank Volume			235,685	
Container Storage								
ERS #1	Any Solid or Liquid Wastestream		Coated concrete				109,086	
ERS #2	Any Solid or Liquid Wastestream		Coated concrete					
Rail cars (4)	B, C, GNA, GNE, GR, GS, GSA, H, I, IA, IB, J						64,000	
				Total Container Volume			173,086	

Legend:

- FRP – Fiber Reinforced Plastic
- M – Mixer
- N/A – Not Applicable
- R-LI – Radar Level Indicator
- UT-LI – Ultrasonic Level Indicator

Notes:

1. All tanks are designed for specific gravity of 1.45
2. Multiple thicknesses listed from bottom section to top section
3. Rain water plus any wastewater from wastes received onsite.

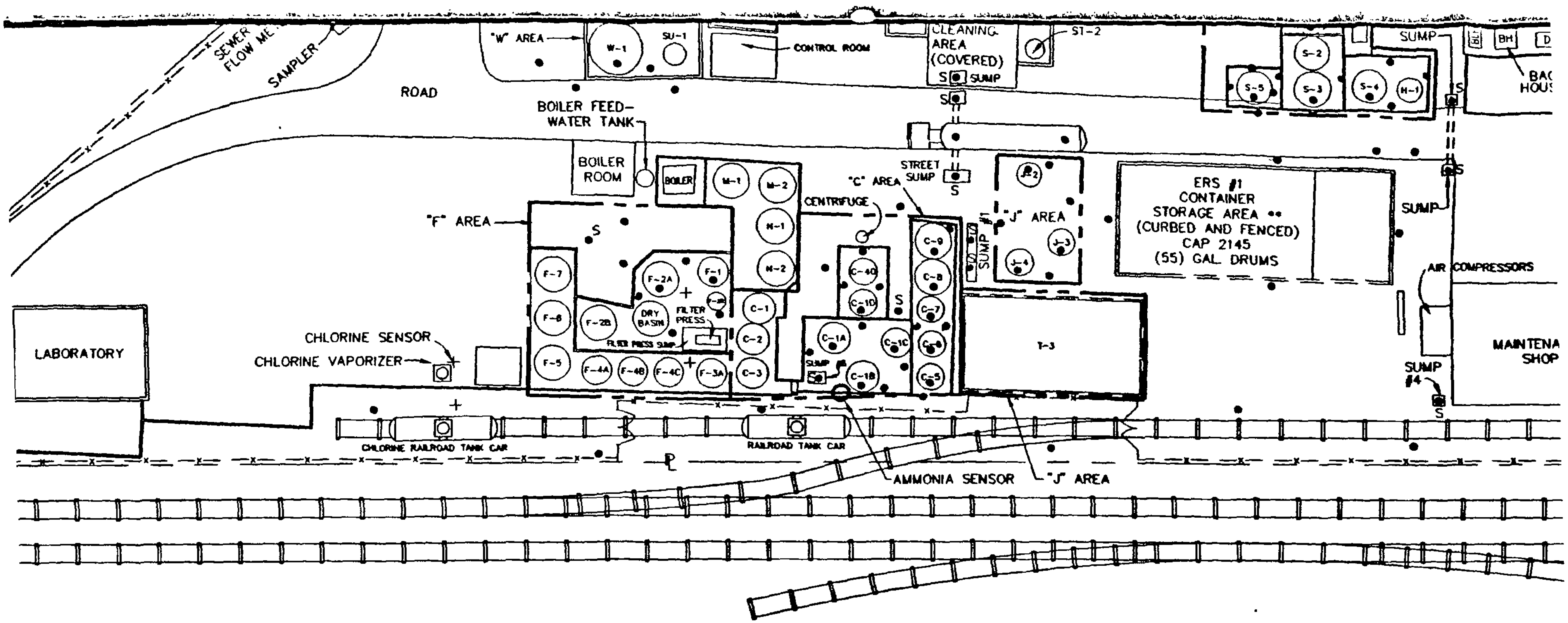


PROJECT NO.	DATE
DESIGNED BY	
DRAWN BY TL	6-13-02
CHECKED BY QT	6-13-02

ENGINEER ______________________

DRAWING NUMBER ____________ DATE ____________

GROU



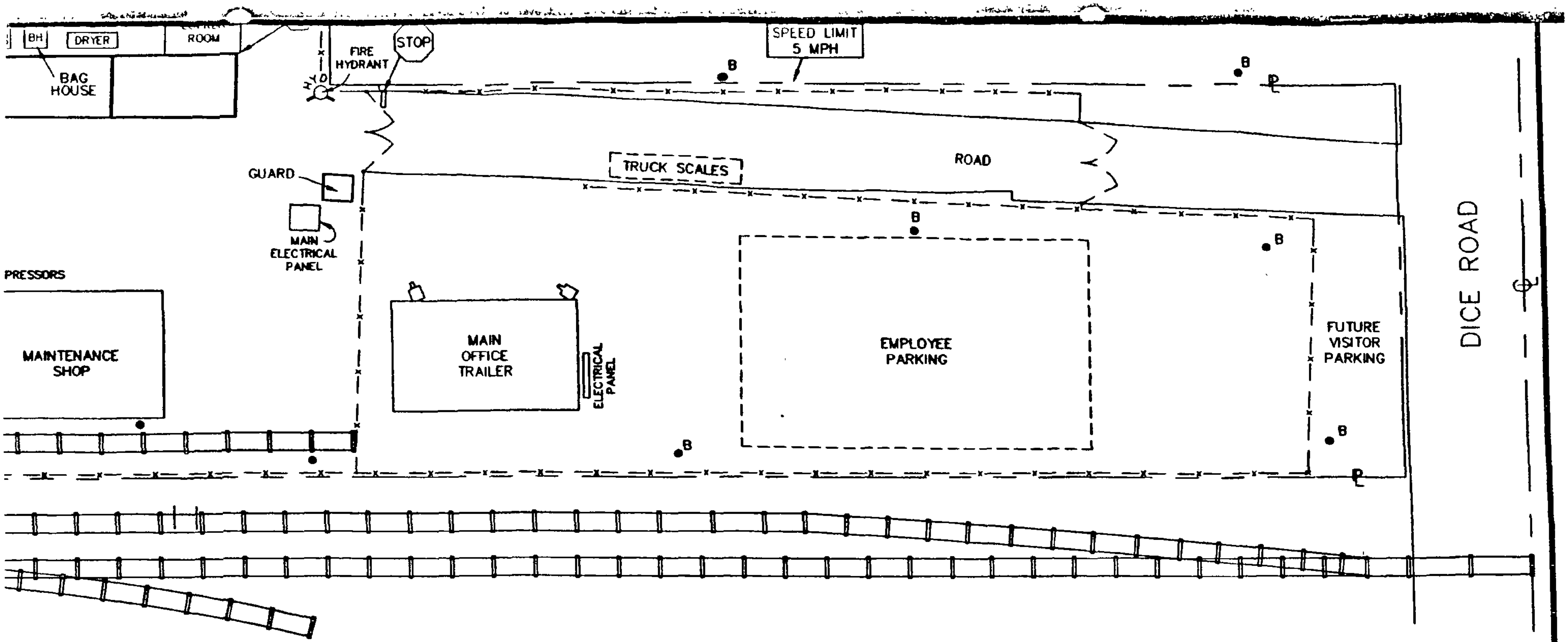
SITE

CT NO	DATE
NED BY	
N BY TL	8-13-02
KED BY OT	8-13-02
EER	
NG NUMBER DATE	

Clayton GROUP SERVICES

mt

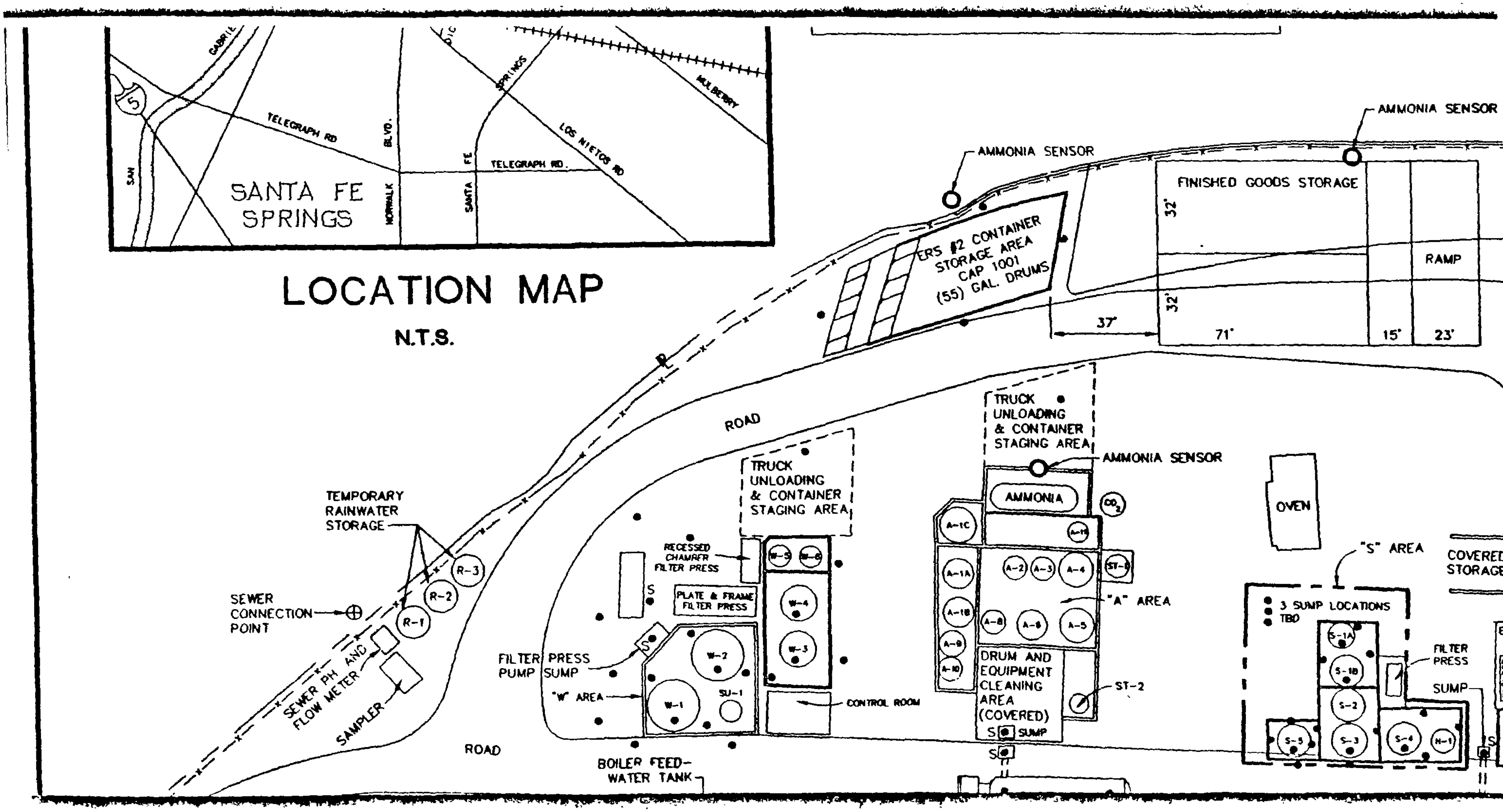
MARK THOMAS & CO. INC.
6920 KOLL CENTER PARKWAY, SUITE 219
PLEASANTON, CA 94566
(925) 417-8000



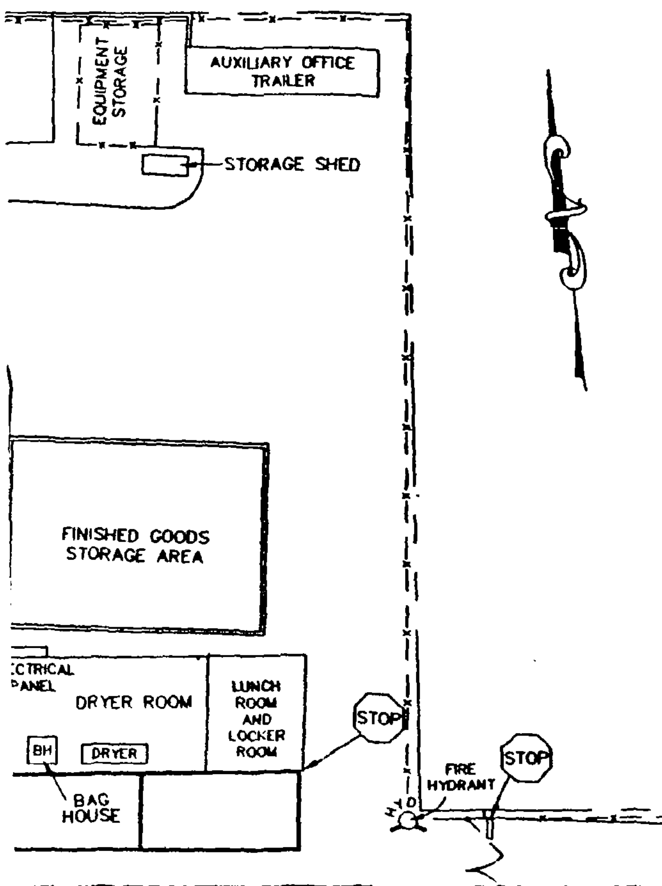
ITE PLAN

REVISED: 06-13-02

NC. E 219	PHIBRO–TECH, INC. 8851 DICE ROAD SANTA FE SPRINGS, CALIFORNIA	FACILITY PLOT PLAN AND SAMPLE LOCATIONS	SCALE 1" = 30'-0" CLAYTON PROJECT# · 70-02742 DRAWING NUMBER FIGURE 2



SANTA FE SPRINGS
TELEGRAPH RD
SAN GABRIEL
NORWALK BLVD.
SANTA FE SPRINGS
LOS NIETOS RD
MULBERRY
LOCATION MAP
N.T.S.
AMMONIA SENSOR
AMMONIA SENSOR
FINISHED GOODS STORAGE
ERS #2 CONTAINER STORAGE AREA CAP 1001 (55) GAL. DRUMS
RAMP
32'
32'
37'
71'
15'
23'
ROAD
TRUCK UNLOADING & CONTAINER STAGING AREA
TRUCK UNLOADING & CONTAINER STAGING AREA
AMMONIA SENSOR
AMMONIA
OVEN
TEMPORARY RAINWATER STORAGE
R-1
R-2
R-3
SEWER CONNECTION POINT
SEWER PH AND FLOW METER
SAMPLER
RECESSED CHAMBER FILTER PRESS
PLATE & FRAME FILTER PRESS
FILTER PRESS PUMP SUMP
"W" AREA
W-1
W-2
W-3
W-4
SU-1
CONTROL ROOM
BOILER FEED-WATER TANK
ROAD
"A" AREA
A-1A
A-1B
A-1C
A-2
A-3
A-4
A-5
ST-2
DRUM AND EQUIPMENT CLEANING AREA (COVERED)
SUMP
"S" AREA
3 SUMP LOCATIONS TBD
S-1A
S-1B
S-2
S-3
S-4
S-5
FILTER PRESS
SUMP
COVERED STORAGE
BLENDER



A-9	SOLUTION	[illegible]
A-10		4500
A-11	SCRUBBER AND PUMP TANK	10000
C-1	AMMONIA RECOVERY	8000
C-1A **	TREATMENT TANK	6000
C-1B **		6000
C-1C **		6000
C-1D **		8800
C-2	SOLUTION	4000
C-3		4000
C-5 **	ACIDIC WASTE STORAGE	10000
C-6 **		10000
C-7 **		10000
C-8 **	ALKALINE WASTE STORAGE	15000
C-9 **		15000
C-40	DECANT TANK	3800
H-1	SULFURIC ACID	6000
J-2 **	STORAGE/TREATMENT TANK	3000
J-3 **	STORAGE/TREATMENT TANK	5900
J-4 **	STORAGE/TREATMENT TANK	5900
M-1	MURIATIC ACID	12000
M-2		12000
N-1	CAUSTIC SODA SOLUTION	10000
N-2		10000

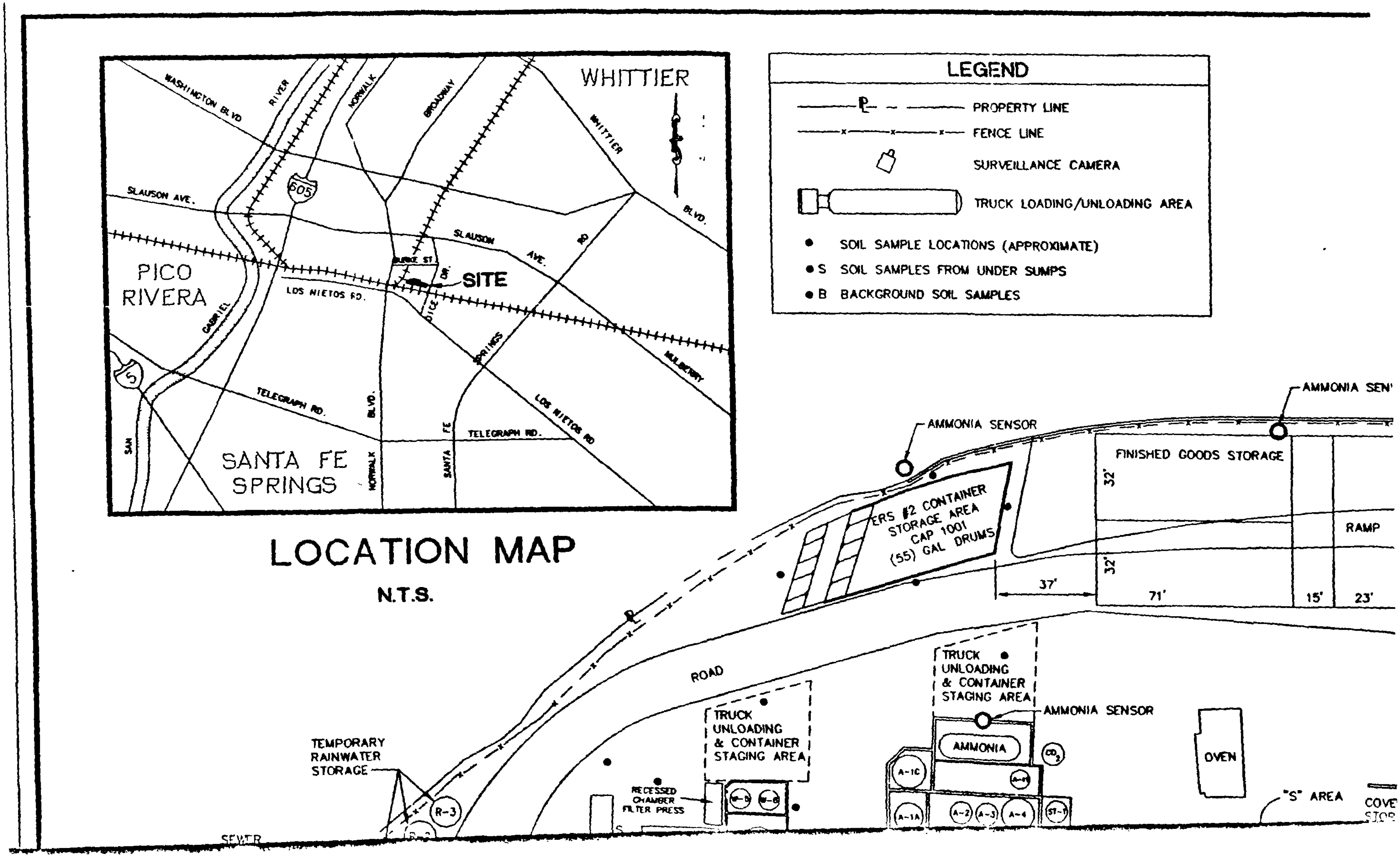
F-3	WATER STORAGE	130000
W-1 **	WATER TREATMENT TANK	30000
W-2 **		30000
W-3		12500
W-4		12500
W-5	WATER STORAGE TANK	22000
W-6	WATER STORAGE TANK	22000
SU-1	ADDITIVE STORAGE TANK	1000
CO_2	CARBON DIOXIDE	52000#
AMMONIA	ANHYDROUS AMMONIA	12000
F-1 **	ACIDIC WASTE STORAGE	10500
F-2A **	TREATMENT TANK	4200
F-2B	STEEL DISSOLVER/STORAGE	10000
F-3B	CAUSTIC SCRUBBER	1000
F-3A	FERROUS SCRUBBER	5000
F-4A	CHLORINATOR	6000
F-4B	CHLORINATOR	6000
F-4C	CHLORINATOR	6000
F-5	ACIDIC PRODUCT STORAGE	15000
F-6	ACIDIC PRODUCT STORAGE	15000
F-7	ACIDIC PRODUCT STORAGE	15000
R-1	RAIN WATER TOWER	21138
R-2	RAIN WATER TOWER	25366
R-3	RAIN WATER TOWER	25366

** HAZARDOUS WASTE TANK OR AREA.

SPEED LIMIT 5 MPH

B

B

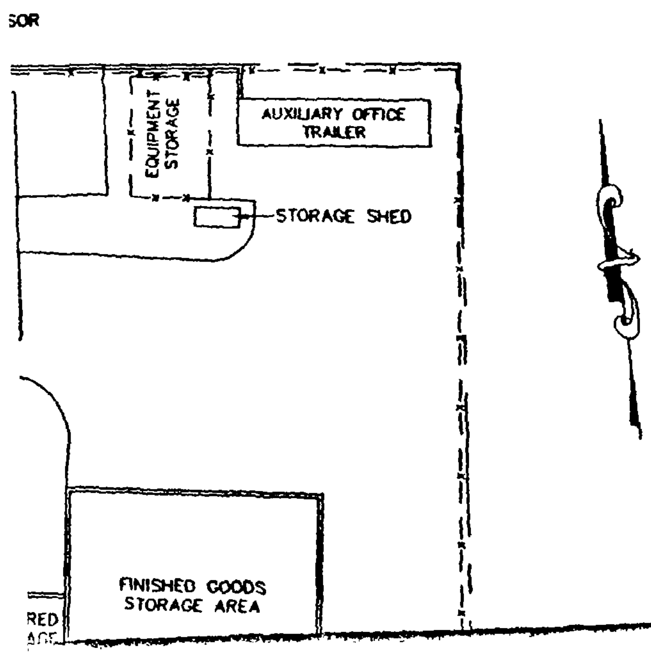


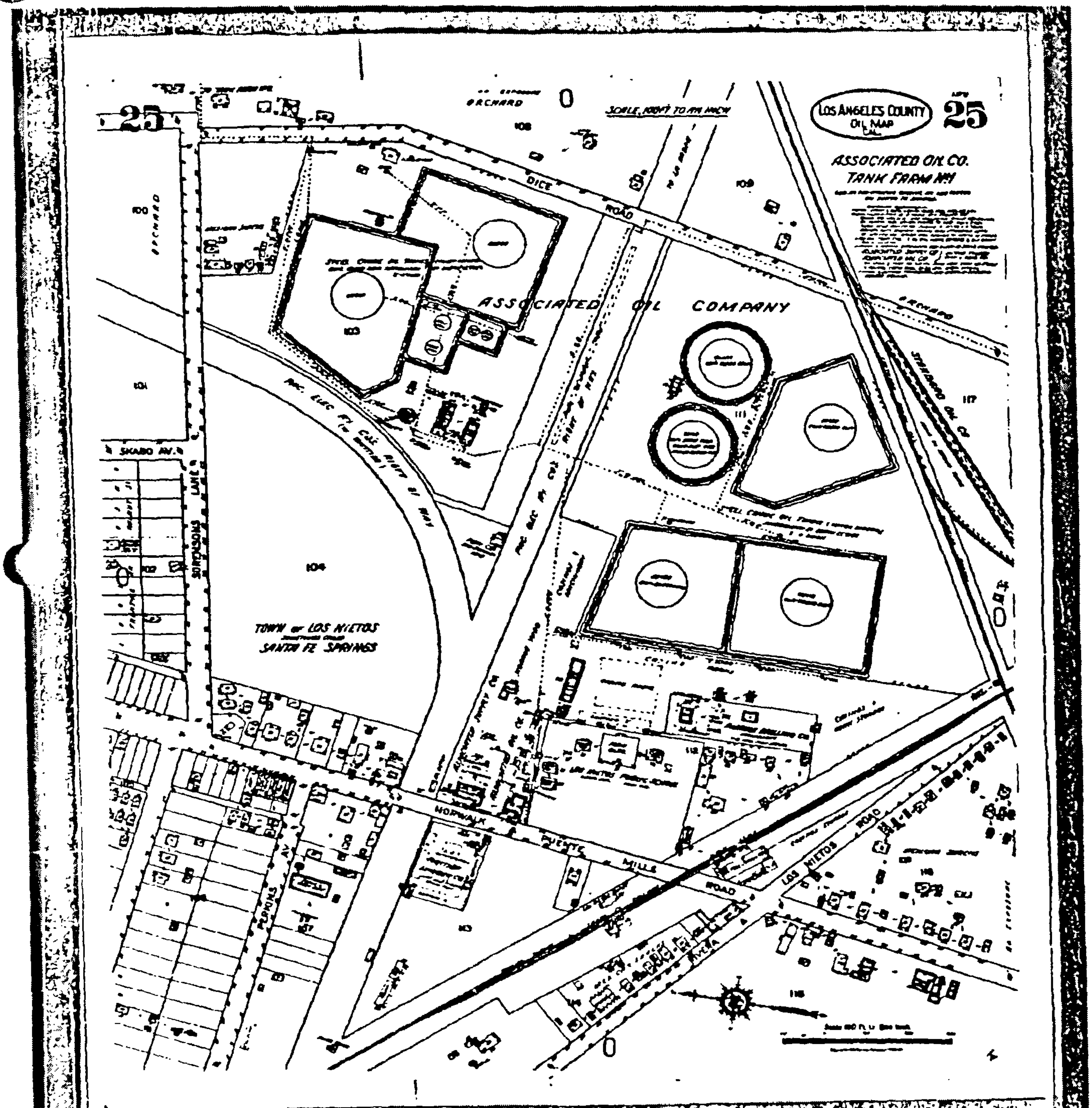
WHITTIER
PICO RIVERA
SANTA FE SPRINGS
SITE
WASHINGTON BLVD
RIVER
NORWALK
BROADWAY
WHITTIER BLVD.
SLAUSON AVE.
SLAUSON AVE.
605
BURKE ST.
LOS NIETOS RD.
GABRIEL
SPRINGS
MULBERRY
5
TELEGRAPH RD.
TELEGRAPH RD.
LOS NIETOS RD.
NORWALK BLVD.
SANTA FE
SAN
LOCATION MAP
N.T.S.
LEGEND
PROPERTY LINE
FENCE LINE
SURVEILLANCE CAMERA
TRUCK LOADING/UNLOADING AREA
SOIL SAMPLE LOCATIONS (APPROXIMATE)
S SOIL SAMPLES FROM UNDER SUMPS
B BACKGROUND SOIL SAMPLES
AMMONIA SENSOR
AMMONIA SENSOR
AMMONIA SENSOR
FINISHED GOODS STORAGE
RAMP
ERS #2 CONTAINER STORAGE AREA CAP 1001 (55) GAL DRUMS
32'
32'
37'
71'
15'
23'
ROAD
TRUCK UNLOADING & CONTAINER STAGING AREA
TRUCK UNLOADING & CONTAINER STAGING AREA
TEMPORARY RAINWATER STORAGE
R-3
RECESSED CHAMBER FILTER PRESS
AMMONIA
A-1C
A-1A
A-2
A-3
A-4
ST-1
OVEN
"S" AREA
SEWER

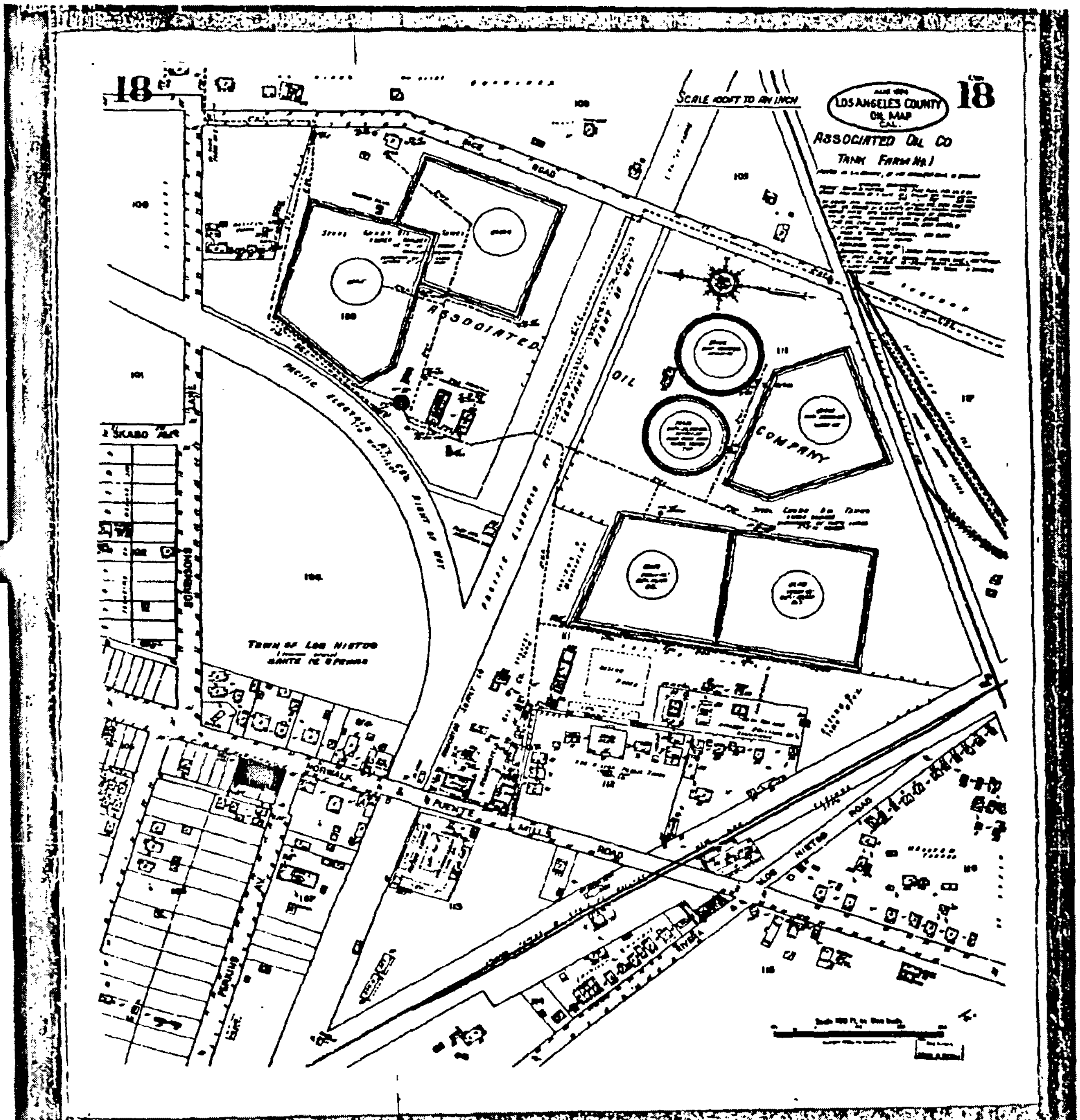
TANK SUMMARY

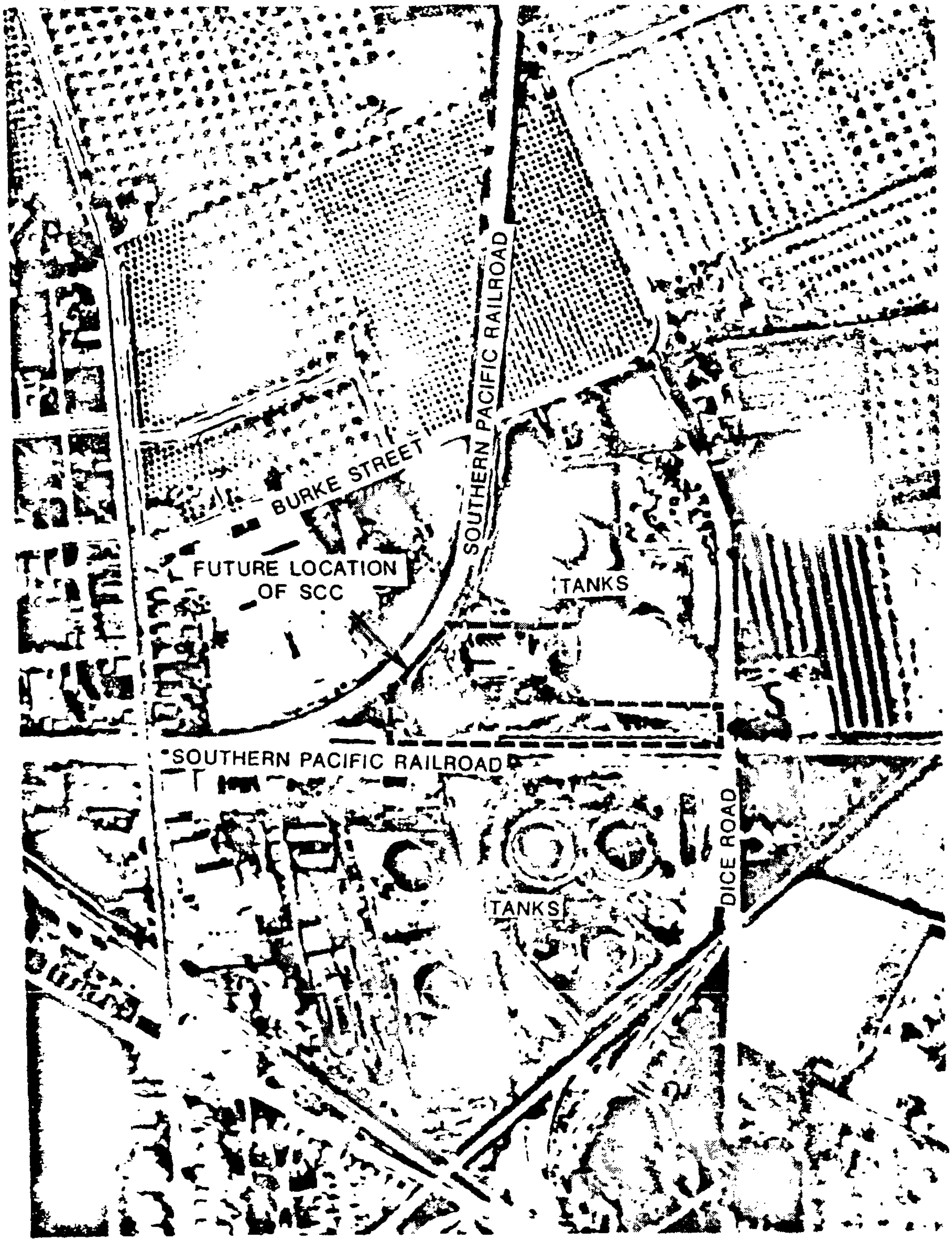
TANK No	PRODUCT	CAPACITY (GAL.)
A-1A	10% AQUA AMMONIA SOLUTION	8000
A-1B		8000
A-1C		8000
A-2		10000
A-3		6000
A-4		13000
A-5		10575
A-6		6000
A-8	SCRUBBER AND PUMP TANK	6000
A-9	SOLUTION	12000
A-10		4500
A-11	SCRUBBER AND PUMP TANK	10000
C-1	AMMONIA RECOVERY	8000
C-1A **	TREATMENT TANK	6000
C-1B **		6000
C-1C **		6000
C-1D **		8800
C-2	SOLUTION	4000
C-3		4000
C-5 **	ACIDIC WASTE STORAGE	10000
C-6 **		10000
C-7 **		10000
C-8 **	ALKALINE WASTE STORAGE	15000
C-9 **		15000
C-40	DECANT TANK	3800
H-1	SULFURIC ACID	6000
J-2 **	STORAGE/TREATMENT TANK	3000
J-3 **	STORAGE/TREATMENT TANK	5900
J-4 **	STORAGE/TREATMENT TANK	5900

TANK No.	PRODUCT	CAPACITY (GAL.)
S-1A **	INORGANIC MIX TANK	6400
S-1B **		6400
S-2	INORGANIC SOLUTION	9300
S-3 **		12000
S-4		12000
S-5 **		10000
ST-1	PRODUCT MIX TANK	3100
ST-2	PRODUCT MIX TANK	1000
T-3	WATER STORAGE	120000
W-1 **	WATER TREATMENT TANK	30000
W-2 **		30000
W-3		12500
W-4		12500
W-5	WATER STORAGE TANK	22000
W-6	WATER STORAGE TANK	22000
SU-1	ADDITIVE STORAGE TANK	1000
CO_2	CARBON DIOXIDE	52000#
AMMONIA	ANHYDROUS AMMONIA	12000
F-1 **	ACIDIC WASTE STORAGE	10500
F-2A **	TREATMENT TANK	4200
F-2B	STEEL DISSOLVER/STORAGE	10000
F-3B	CAUSTIC SCRUBBER	1000
F-3A	FERROUS SCRUBBER	5000
F-4A	CHLORINATOR	6000
F-4B	CHLORINATOR	6000
F-4C	CHLORINATOR	6000
F-5	ACIDIC PRODUCT STORAGE	15000
F-6	ACIDIC PRODUCT STORAGE	[illegible]




LOS ANGELES COUNTY OIL MAP CAL.
25
ASSOCIATED OIL CO.
TANK FARM No. 1
SCALE, 100 FT. TO AN INCH
ASSOCIATED OIL COMPANY
DICE ROAD
ORCHARD
TOWN OF LOS NIETOS
SANTA FE SPRINGS
NORWALK
PUENTE MILLS ROAD
LOS NIETOS ROAD
SHABO AV.
PERKINS AV.
25


18
18
SCALE 100FT TO AN INCH
LOS ANGELES COUNTY OIL MAP CAL.
ASSOCIATED OIL CO
TANK FARM No. 1
ASSOCIATED
OIL
COMPANY
PACIFIC ELECTRIC RY. CO'S RIGHT OF WAY
RICE ROAD
TOWN OF LOS NIETOS
SANTE FE SPRINGS
NORWALK
PUENTE
MILL
ROAD
LOS NIETOS ROAD
SKABO AVE



SOUTHERN CALIFORNIA CHEMICAL	
1928 HISTORICAL AIRPHOTO	
Camp Dresser & McKee **CDM**	FIGURE 6-4

Appendix E
Previous Investigations

Kleinfelder Investigation

TABLE D

TABULATION OF SOIL DATA

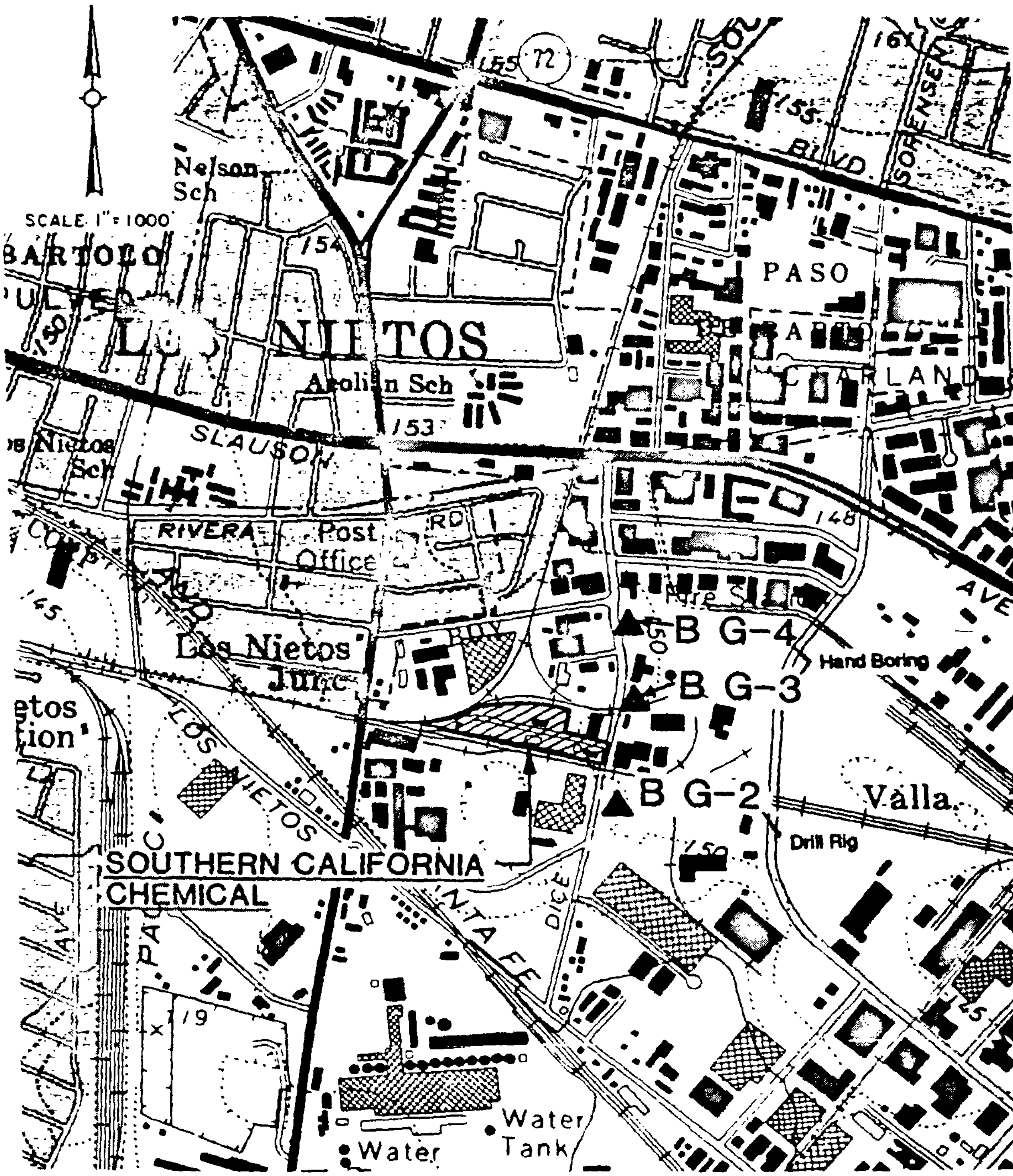
(mg/kg)

oring #	Depth	pH	Cadmium	Chromium	Copper	Zinc	Nickel	Chloride	Sulfate	Ammonia Nitrogen	Carbonate
1	10	8.0	--	53	470	--	--	--	--	--	--
	15	7.0	--	13	130	--	--	--	--	--	--
	40	3.9	1.5	600	400	180	--	5100	20	29	ND
	50	5.5	8.0	280	160	95	--	2600	71	10	ND
2	15	3.9	--	54	390	--	--	--	--	--	--
	20	3.9	--	440	230	--	--	--	--	--	--
	35	3.3	1.2	2000	250	120	--	5500	41	42	ND
	40	3.3	1.4	150	550	170	--	2900	45	11	ND
3	5	8.1	--	420	1200	--	--	--	--	--	--
	15	6.3	ND 0.67	11	31	57	--	1100	110	23	ND
4	5	4.6	--	10000	480	--	--	--	--	--	--
	10	4.0	ND 0.62	16000	820	92	--	--	--	--	--
	25	4.2	ND 0.61	550	1200	52	--	1400	450	25	ND
5	5	8.7	--	85	230	--	--	--	--	--	--
	10	8.3	--	30	78	79	26	--	--	--	--
	15	4.8	--	3200	12000	--	--	1600	170	21	ND
	25	4.5	--	49	160	34	12	--	--	--	--
6	5	4.5	--	3700	460	--	--	--	--	--	--
	15	3.6	--	5100	4100	430	240	1800	2000	500	ND
	25	4.2	--	1500	1400	43	98	--	--	--	--

otes = Depth is in feet
ND 0.67 = Not Detected at 0.67 mg/kg (ppm)

Current Conditions Report

Phase I RFI



SOURCE: 1981 USGS MAP, WHITTIER QUADRANGLE CALIFORNIA 7.5 MINUTE SERIES (TOPOGRAPHIC)

LEGEND

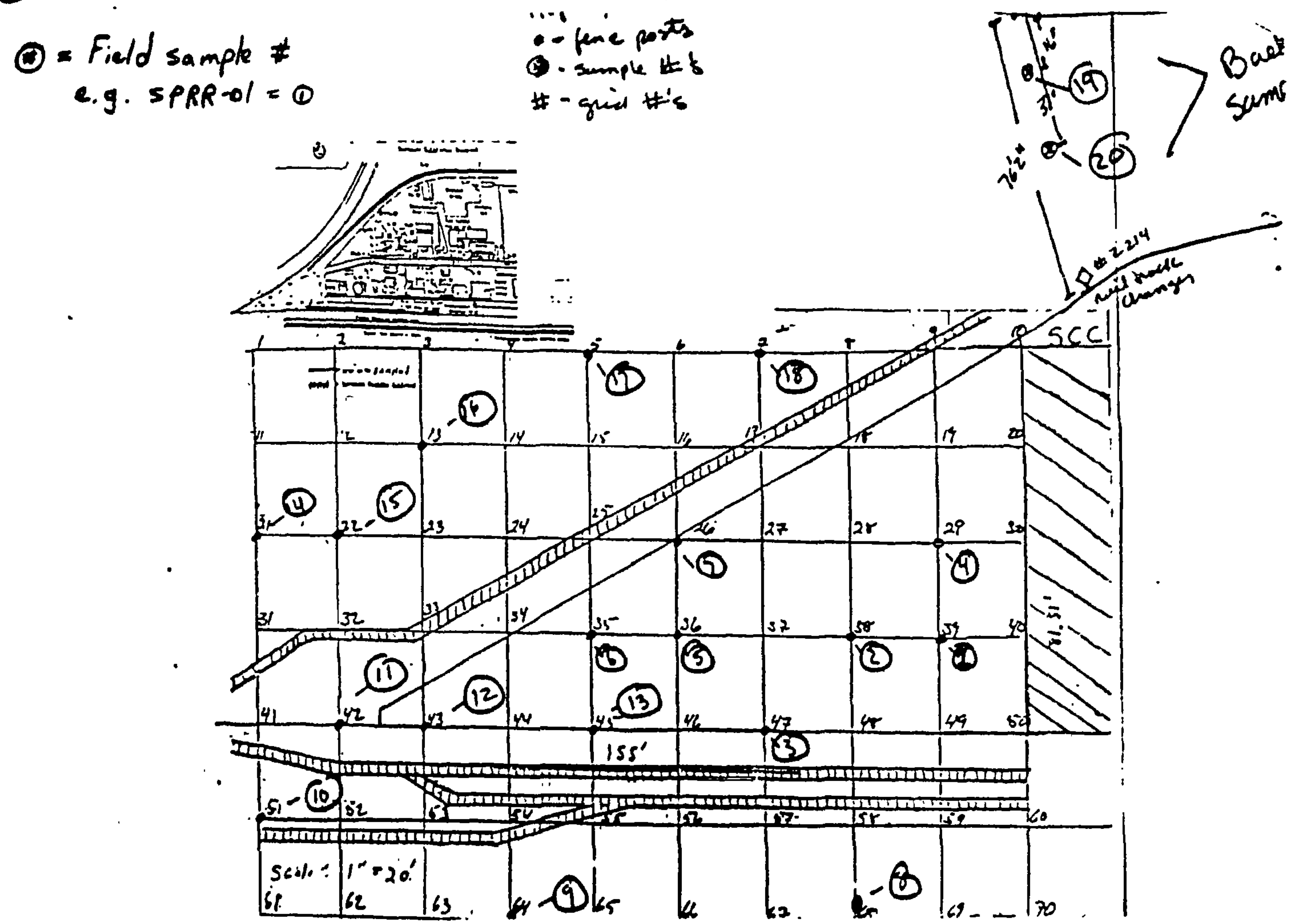
▲	VERTICAL BORING LOCATION
B G-2	BORING NUMBER
—150—	20 FOOT CONTOUR INTERVAL
····145····	5 FOOT CONTOUR INTERVAL
▬▬	HEAVY-DUTY ROAD
═══	LIGHT-DUTY ROAD
=======	UNIMPROVED DIRT ROAD
(72)	STATE ROUTE

SOUTHERN CALIFORNIA CHEMICAL

OFF-SITE BACKGROUND SOIL BORING LOCATIONS

CAMP DRESSER & McKEE INC.
Irvine, California
CDM

Figure 3-2



SOURCE: Modified from DHS Field Notes Indicating Sample Locations.

SOUTHERN CALIFORNIA CHEMICAL

DHS OFF-SITE METALS and PCB SAMPLE LOCATIONS WEST of SCC

Camp Dresser & McKee
CDM

Figure 4-1

TABLE 4-1

SOUTHERN CALIFORNIA CHEMICAL

RCRA Facility Investigation Surface Soil Sampling

Calculated Average Values & Background Metals Concentration in Soil

(mg/kg)

Comment or Reference	Arsenic	Cadmium	Chromium (Hexavalent)	Chromium (Total)	Copper	Iron	Mercury	Nickel	Lead	Zinc	pH
Calculated On-site Average	NA	ND	0.73	23.7	30.7	14,250	NA	19.5	8.4	47.8	8.0
Calculated Off-site Average	NA	ND	1.75	20.4	22.1	18,000	NA	14.8	9.4	24	7.6
Calculated Combined Average	NA	ND	1.5	21.2	24.1	17,100	NA	15.9	9.1	29.9	7.7
Referanced Metals Concentration in Soil											
U.S. GEOLOGICAL SURVEY (__)											
Western U.S. Range	<0.1 - 97	<1 - 10		3 - 2000	2 - 300		<0.01 - 4.6	<5 - 700	10 - 700	9 - 2100	NA
Western U.S. Mean	7	1		56	27		0.065	19	20	65	NA
SOIL CHEMISTRY (__)											
Average in Lithosphere		0.2		100	70		40	100	10	80	NA
Soil Content		0.01 - 7		5 - 3000	2 - 100		0.008 - 0.1	0 - 1000	2 - 200	10 - 300	NA
Natural and Apparently Safe Typical Value	8	0.06		2	20		0.05	40	10	80	NA
Natural and Apparently Safe Range	1 - 50	0.01 - 7		5 - 1000	2 - 100		0.02 - 0.2	0 - 1000	2 - 200	10 - 300	NA

File Name: backor wk1

REVISED 3-10-92

NOTE: Calculated Average Values Do Not Include Anomalous Results

ND = Not Detected   NA = Not Analyzed

TABLE 4-2
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Surface Soil, Active Sumps, and Surface Water Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
DD01	1-2	1.1	ND	43.0	135	30,900	33.0	17.6	97.0	8.7
DD02	1-2	1.2	ND	302	7,200	13,900	519	112	355	5.9
DD03	1-2	0.50	ND	40.7	226	23,200	83.8	17.8	214	4.5
DD04	1-2	ND	ND	20.4	40.5	13,700	18.2	24.0	77.6	NA
DD05	1-2	ND	ND	366	1,400	22,400	186	167	371	5.2
DD06	1-2	0.82	ND	1,480	2,600	51,700	260	379	748	NA
DHS-HB01	0-1.5	3.6	ND	2,630	231	28,100	72.6	732	271	5.7
DHS-HB02	0-2	15.0	53.7	8,070	1,970	34,700	101	949	4,150	7.6
DHS-HB03	0-2	21.8	30.5	1,380	6,570	33,200	363	19,100	14,000	6.9
LAB-HB01	0.5-1	0.83	0.62	105	556	15,700	30.4	88.7	982	8.1
	1-2	ND	ND	36.4	39.6	31,800	29.4	ND	64.0	9.2
	3-4	ND	ND	32.4	37.4	25,300	24.9	ND	55.1	9.5
	5-6	ND	ND	28.0	32.4	23,200	22.3	ND	48.6	9.2
PL-HB01	0.5-1	ND	ND	42.7	170	14,400	28.2	30.0	103	9.7
	3-4	ND	ND	34.0	36.1	30,700	23.1	8.4	60.5	6.7
	5-6	ND	ND	32.9	34.3	29,900	22.9	8.1	60.0	6.9
PL-HB02	1-2	ND	ND	23.9	31.8	21,100	19.2	ND	49.2	6.1
	3-4	ND	ND	34.4	37.9	30,700	27.6	ND	67.1	8.2
	5-6	ND	ND	38.3	42.4	32,300	30.7	ND	68.8	8.8
PL-HB03	2.5-3	ND	ND	33.0	29.6	28,300	21.4	6.91	51.6	8.4
	4.5-5	ND	ND	50.1	50.0	36,000	35.4	9.1	74.2	8.8
	6-6.5	ND	ND	38	43.1	29,400	31.5	8.6	65.8	8.7
PL-HB04	1-2	ND	ND	23.0	96.7	21,000	32.2	48.5	94.2	6.5
	3-4	ND	ND	21.8	75.0	18,600	45.7	9.0	114	5.4
	5-6	ND	ND	36	109	29,800	102	ND	234	5.4
RR01	1-2	1.3	216	3,840	1,170	40,200	85.1	240	331	4.7
RR02	1-2	0.82	9.0	550	808	17,000	713	39.8	410	4.9

Shaded Box Indicates Value is Greater Than One Order of Magnitude Above Background.

ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-2
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Surface Soil, Active Sumps, and Surface Water Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
RR03	1-2	1.1	10.3	243	1,260	18,500	470	36.1	297	6 3
RR04	1-2	ND	ND	86.1	540	18,100	108	44.2	134	4.5
RR05	1-2	ND	ND	21.1	42.3	16,700	19.2	7.1	55.2	8.0
RR06	1-2	1.4	ND	22.4	123	17,000	79.7	8.1	101	6.4
UST-HB02	approx. 20	0.10	ND	4.9	52	7,100	5.7	4.2	26	NA
UST-HB03	approx. 20	NA	NA	NA	NA	NA	NA	NA	NA	8.4
UST-HB05	approx. 20	NA	NA	NA	NA	NA	NA	NA	NA	8.6
WMU09	1-2	1.8	96.6	2,960	1,250	18,400	39.9	1,380	442	7.7
WMU18/19	1-2	1.9	ND	828	6,070	44,000	1,070	1,000	869	4.5
	3-4	ND	ND	353	9,660	29,400	425	317	369	4 5
	5-6	ND	ND	26.7	2,160	35,000	260	45.7	259	3 2
WMU20A	1-2	4.7	ND	1,190	770	16,200	98.2	113	316	7.6
WMU20B	1-2	4.4	1.4	244	426	12,800	218	541	267	7.4
WMU22	1-2	1.5	ND	502	498	24,400	35.6	180	137	4.6
WMU23A	1-2	3.5	ND	194	8,340	15,100	151	105	187	8.7
WMU23B	1-2	1.2	ND	1,010	358	15,600	88.1	1,810	687	9.4
WMU24	1-2	2.6	ND	117	235	13,200	15.8	827	1,630	7.5
WMU25	0-2	ND	ND	1,040	5,760	23,300	1,220	189	389	6.2
WMU31	1-2	4.6	ND	29.6	161	17,800	37.2	22.3	313	7.1
	3-4	1.8	ND	42.8	599	15,300	61.1	8.5	936	7.1
WMU32	1-2	2.8	ND	428	1,740	9,320	170	61.2	2,300	7.4
	3-4	1.4	ND	92	1,330	17,200	74.2	15.3	818	7.3
WMU33B	0	1.7	ND	96.8	368	8,430	29.8	61.7	391	9.2
	1.5-2.5	7.2	ND	21	1,770	17,400	38.6	10.4	1,120	5.6
WMU35B	2-3	ND	ND	40.7	454	18,500	254	11.4	126	5.2
	6-7	ND	ND	35.2	96.3	29,900	41.0	ND	64.6	7.9
WMU36A	1.5-2.5	11.7	13.0	3,020	4,690	15,600	2,410	258	2,720	9.8

Shaded Box Indicates Value Is Greater Than One Order of Magnitude Above Background.

ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-2
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Surface Soil, Active Sumps, and Surface Water Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
	4-5	ND	ND	46 6	59.3	19,600	36.1	10.3	88.4	7 1
WMU42	1 5-2 5	0 64	ND	31.1	68.3	17,100	16 2	130	158	8.0
	4-5	ND	ND	37.4	61.6	29,500	30.7	38.5	188	7.4
WMU46A	0-2	ND	ND	185	1,340	23,900	506	172	262	7.9
	2-4	ND	ND	19 6	1,970	17,800	1,560	93.0	389	5.2
	4-6	ND	ND	32.7	49 4	26,200	429	ND	111	6.4
WMU46B	1-2	ND	0.98	9,570	23,100	31,200	6,230	1,370	2,170	7 5
	2-4	ND	ND	18 8	1,530	16,100	472	25.2	238	5.0
	4-6	ND	1 27	7,530	13,300	28,800	11,800	2,180	2,920	6.9
WMU46C	1-2	3 1	6 5	937	3,780	17,100	520	465	928	12
	3-4	1.9	ND	118	7,060	15,600	102	42.8	255	7 6
	5-6	1.4	ND	64.3	2,780	20,200	269	32.3	920	7.0
WMU46D	1-1.8	ND	6.0	1,410	5,970	29,500	380	18,300	14,600	6.9
	3	ND	ND	15.6	56.9	11,200	14.0	46 8	80	7.5
	5	ND	ND	22.0	866	20,500	226	9.0	161	6.1
WMU46E	1.5	15.6	9.7	778	4,270	26,750	284	6,320	12,200	6.9
	3	19.2	23.9	1,970	5,680	45,700	362	16,900	14,400	6.9
	5	4 0	23.9	988	4,250	22,200	362	1,590	2,540	7.3
ACTIVE SUMP SLUDGE SAMPLES										
WMU33A	0	ND	ND	627	29,400	38,600	133	1,660	672	7.0
WMU34	0	ND	ND	210	90,500	24,800	ND	1,260	2,720	6.9
WMU35A	5	ND	35.1	748	88,500	47,600	564	615	559	5.2
WMU36B	2.5	ND	ND	1,000	93,400	69,900	629	38,700	1,520	8.6

Shaded Box Indicates Value Is Greater Than One Order of Magnitude Above Background.

ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-2
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Surface Soil, Active Sumps, and Surface Water Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
SURFACE WATER (UNITS = mg/L)										
SW1		ND	ND	ND	0.034	ND	ND	ND	0.63	8.0
SW2		ND	ND	ND	0.81	ND	0.30	ND	0.62	6.8
SW3		0.0057	ND	ND	0.61	ND	0.41	ND	0.72	6.9
SW4		ND	ND	ND	0.23	ND	ND	ND	0.22	6.8

FILE NAME: NSOLMET.WK1

Shaded Box Indicates Value is Greater Than One Order of Magnitude Above Background.
ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Subsurface Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
BG02	2-2.5	ND	0.96	33.2	28.7	28,100	22.4	7.2	61.1	8.1
	5-5.5	ND	1.2	32.3	31.3	27,300	24.4	6.1	59 5	8.2
	10-10.5	ND	3.1	8.4	9.3	11,900	6.7	ND	27.6	7.0
	15-15.5	ND	ND	6 8	8.3	8,490	5.4	ND	20.2	7.3
	20-20.5	ND	ND	9.9	9.4	10,900	7.6	ND	33.8	7.0
	30-30.5	ND	60.5	32.3	36.8	29,400	27.4	9.5	73.5	7.7
	40-40.5	ND	ND	35.2	32.9	28,800	26.8	6.6	86.8	7.8
BG03A	1-2	ND	ND	14.7	21.4	11,600	9.2	18.4	18.4	7.3
	5-6	ND	ND	21.5	23.3	19,000	15.3	6.7	6.7	7.4
	7-8	ND	ND	33.4	35.6	27,100	23.8	9.2	9.2	7.5
	10-11	ND	ND	21.4	25.2	19,400	17.3	6.0	7.8	7.2
BG03B	1-2	ND	ND	11.1	17	8,840	12	21.1	21.1	7.6
	5-6	ND	ND	20.6	28	18,100	16.2	6.8	6.8	8.0
	7-8	ND	ND	17.8	20.7	16,200	12.6	6.5	6.5	7.7
	10-11	ND	ND	21.2	25.5	19,700	17.4	5.2	5.2	7.3
BG04A	1-2	ND	ND	16.3	14.4	14,500	10	14.3	14.3	7.6
	5-6	ND	ND	22.8	21.0	19,200	14.3	7.0	7.0	7.5
	7-8	ND	ND	16.8	19.3	15,300	11.2	5.1	5.1	7.9
	10-11	ND	ND	15.0	17.0	13,700	10.3	ND	ND	8.0
BG04B	1-2	ND	ND	16.6	23.4	14,400	11.1	22	22	7.4
	5-6	ND	ND	21.3	19.4	19,000	14.6	6.2	6.2	7.9
	7-8	ND	ND	21.8	23.2	19,000	14.2	5.2	5.2	7.9
	10-11	ND	ND	18.6	17.7	14,200	11.2	ND	ND	7.4
FeCl-SB04	1	1.7	1.8	711	463	17,300	42.7	243	413	8.0
	5	1.9	ND	558	461	22,400	50.9	188	500	9.2
	11.5	ND	ND	17.6	20.7	16,600	14.2	ND	34.8	6.7
	15	ND	ND	8.5	12.2	9,790	7.7	ND	21.3	7.4

Shaded Box Indicates Value Is Greater Than One Order of Magnitude Above Background.
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth
ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Subsurface Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
	19	ND	ND	8.6	15.0	11,100	9.9	ND	28.2	7.8
MW01D	2	40 4	ND	10,400	13,900	47,400	28,400	517	40,100	7.6
	5.5	2.8	ND	3,800	2,900	24,400	624	61.8	2,840	8.3
	10.5	ND	0.73	40 7	49.3	25,300	30.2	ND	65 6	8.1
	15.5	ND	ND	8.4	11.2	24,100	5	ND	13.9	8.1
	20.5	ND	ND	6.7	11.3	6,960	6.7	ND	20.5	8 0
	25.5	ND	ND	6.1	9.5	6,040	7.2	ND	17.9	7.7
	30.5	ND	ND	17.4	27.6	18,400	18.3	ND	50.5	7.7
	40 5	ND	ND	26.0	41.8	21,500	25.5	6.5	64.8	7.9
	65 5	ND	ND	28.4	49.6	4,360	27.4	6.2	64.8	8.1
	97	ND	ND	22.8	25.4	17,200	21.5	ND	50.5	8.3
MW06D	5.5	ND	ND	26.	524	21,400	746	ND	279	5.1
	10	0.57	ND	27.4	604	21,800	668	11.4	309	4.9
	15	ND	ND	6.4	17.9	6,830	7.8	ND	20.3	8.2
	25	ND	ND	18.2	28.1	19,500	17.9	ND	56.3	7.4
	40	ND	ND	27.1	43.7	25,000	24.	5.4	60.2	7.2
	60	ND	ND	6.3	6.1	5,970	5.1	ND	13.7	7.9
	95	ND	ND	23.4	25.8	19,100	20.9	6.9	69.8	7.9
MW12D	25	ND	ND	14.2	16.9	14,100	13.3	5.2	43.1	8.4
	65	ND	ND	5.8	6.4	5,580	4.2	ND	14.2	7.9
	100	ND	ND	21.4	26.8	18,400	21.6	ND	45.4	8.6
MW13D	25	ND	ND	6.6	8.2	7,410	6.7	ND	21.9	8.1
	65	ND	0.74	94.4	33.9	14,400	14.5	ND	47.7	10.2
	95	ND	ND	20.0	29.9	18,100	19.4	ND	50.5	8.3
MW14D	25	ND	24.5	268	39.9	5,580	4.9	ND	16.6	4.4
	65	ND	16.3	18.3	23.3	15,300	19.7	ND	58.6	6.8
	110	ND	0.30	133	66.6	16,400	16.0	ND	43.3	7.8

Shaded Box Indicates Value is Greater Than One Order of Magnitude Above Background.
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth
ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-3

SOUTHERN CALIFORNIA CHEMICAL

RCRA Facility Investigation *Subsurface* Soil Sampling

Metals and pH Analytical Results

(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
MW15D	19.5	ND	ND	5.2	7.0	6,440	4.6	ND	17.2	9.0
	62.5	0.76	ND	12.0	57.4	8,820	9.6	6.3	107	8.2
	105.5	ND	ND	5.8	29.8	6,260	5.6	ND	18.7	7.8
	125.5	ND	ND	4.5	17.1	6,620	4.2	ND	25.6	8.4
PI01	2.5	5.1	ND	37,000	1,180	20,900	39	61.3	126	10.0
	3	1.6	ND	2,360	1,120	17,400	41.4	6.4	108	9.9
	7	1.1	4.0	136	176	18,500	17.7	ND	39.9	8.6
	12	ND	94.5	894	91.3	30,300	26.8	ND	67.4	4.1
	17	ND	1.8	91.6	19.0	8,810	7.1	ND	22.4	8.3
	21.5	ND	61.2	239	24.7	9,930	8.5	ND	22.2	4.1
	27	ND	5.9	1,420	66.0	20,500	17.6	ND	47.4	8.4
	37	ND	ND	225	251	36,900	119	7.8	109	3.6
PI02	0	2.9	15.6	2,980	2,110	18,300	205	81.3	130	10.1
	1.5	0.90	ND	1,780	23.7	15,700	14.8	ND	40.3	9.2
	5/4.5	ND	ND	33.1	28.0	21,800	20.6	5.4	50.9	7.2
	16/11	ND	14.4	2,960	1,040	15,900	25.1	34.4	92.5	9.2
	22/16.5	ND	24.4	755	52.5	12,600	10.3	ND	29.1	4.2
	26.5/23	ND	30.9	600	33.4	6,870	5.4	ND	13.6	4.3
	32/35	1.2	199	2,190	299	21,800	34.2	ND	75.3	3.2
	45/36.5	2.5	ND	50.2	59.4	30,000	35.2	10.4	77.7	5.9
PI03	0.5	ND	143	6,940	908	41,300	12.9	641	24.7	9.3
	1.5	ND	ND	1,870	604	13,300	39.6	63.5	115	9.5
	5	2.9	5.6	1,380	1,260	22,100	90.5	6.4	78.3	8.8
	11.5	ND	5.7	465	107	15,800	15.0	5.9	36.4	8.6
	16	ND	9.9	714	218	18,200	23.5	21.6	43.6	8.5
	20.5	ND	4.4	274	98.4	7,780	12.6	ND	27.6	8.7
	25.5	ND	17.1	218	84.3	5,890	10.8	ND	24.6	5.2

Shaded Box Indicates Value Is Greater Than One Order of Magnitude Above Background.

Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

ND = Parameter Not Detected

NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Subsurface Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
	35.5	ND	1.5	124	408	29,400	72.4	ND	120	3.7
PI04	1	2	ND	552	323	19,100	309	1,090	872	7.9
	2	2.6	ND	28.4	82.5	10,500	41.7	1,660	1,170	8.2
	6	ND	ND	1,870	17,400	29,300	652	704	476	8.3
	11	ND	ND	37.5	53.8	31,500	30	8.8	63.7	7.2
	17	ND	ND	13.3	22.2	13,300	12.3	ND	35	7.3
	21.5	ND	ND	6.3	11.3	6,080	5.1	ND	16	7.0
	26.5	ND	ND	25.8	10.4	9,020	16.6	ND	26.1	8.7
	36	ND	ND	30.0	94.0	11,000	13.8	15.4	36.6	7.5
PI05	1	1.4	ND	65.2	1,580	28,400	134	1,010	584	7.7
	1.5	2.0	21.4	62.7	980	18,000	45.9	2,830	1,070	6.7
	5	ND	ND	34.2	314	20,800	24.0	26.6	210	4.5
	10	ND	ND	33.0	39.4	28,200	28.3	10.6	57.8	6.2
	15	ND	ND	13.6	14.3	10,700	11.6	ND	26.4	6.4
	20	ND	ND	8.4	21.2	9,380	12.1	ND	40.6	6.5
	25	ND	2.1	37.8	32.0	10,200	7.3	ND	24.9	6.9
	35	ND	7.9	42.9	29.0	19,600	68.3	ND	135	6.2
PI06	1	4.6	ND	1,710	7,090	17,600	340	885	2,790	9.1
	1.5	1.7	ND	293	3,950	16,600	217	416	1,550	9.0
	5	ND	ND	23.9	201	23,400	46.5	ND	86.8	9.2
	10	5.1	ND	1,140	2,550	16,700	237	684	1,690	9.3
	15	ND	7.9	76.5	63.5	12,000	15.8	ND	171	8.6
	20	ND	3.1	58.8	14.7	9,790	11.0	ND	101	8.2
	25	ND	7.5	70.3	55.7	6,080	13.7	ND	67.2	8.5
	35	9.0	143	138	34.7	22,800	23.1	6.1	63.2	6.3
PI07	0	24.2	ND	2,050	3,390	30,200	498	4,200	21,100	9.4
	5	ND	ND	26.1	751	23,200	53.6	ND	113	9.0

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Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth
ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Subsurface Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
	10	0.82	0.74	61.5	42 6	26,400	28.6	6.2	63.7	6.7
	15	ND	10.4	867	88.4	10,100	8.9	ND	24.6	4.5
	20	ND	8.9	429	50.1	9,770	8.7	ND	26.0	4.4
	25	ND	7.4	462	33.6	7,090	4.4	ND	13.8	4.6
	35	ND	61.8	720	409	23,300	70.4	5.6	106	3.4
RSO1	1	ND	ND	138	20.0	1,780	58.9	ND	64.8	9.1
	3	5.0	ND	779	215	7,490	788	13.8	165	6.1
	5	1.4	ND	19.4	83	16,300	30.7	ND	150	7.4
	10	ND	ND	20.9	24 9	18,800	19.3	6.0	47.8	8.5
	15	ND	ND	14.9	19.4	15,000	14.0	ND	37.9	8.2
	20	ND	ND	4.6	6.3	5,160	4.1	ND	14.4	8.4
	30	ND	ND	6.5	8.4	6,700	5.6	ND	18.7	8.2
	40	ND	1.2	28.4	38.2	23,800	24.3	5.7	61.9	8.7
RSO2	1	1.9	ND	250	346	16,600	63.2	143	99.7	3.0
	3	1.0	0.77	221	774	10,600	65.7	41	104	3.5
	5	6.5	ND	38.2	206	21,300	363	116	2,940	6.3
	10	ND	ND	33.5	116	30,600	59.1	11.0	225	4.6
	15	3.1	ND	13.4	17.7	14600	30.6	5.0	299	7.1
	20	1.0	ND	5.8	8.0	7,250	7.7	ND	65.2	6.8
	30	0.60	ND	5.2	6.6	5,380	7.1	ND	75.3	5.8
	40	ND	ND	32.6	48.7	31,000	32.6	15.2	81.0	8.7
RS03	1	14.2	ND	37.3	91.9	13,100	100	6,650	3,700	7.4
	3	161	ND	3,140	19,100	15,600	390	113,000	23,800	6.1
	5	2.6	ND	4,040	767	19,300	55.3	911	916	8.8
	10	ND	ND	22.6	29.9	19,600	22.1	12.9	62.1	7.8
	15	8.6	ND	26.5	45.6	21,200	21.8	47.6	61.9	7.1
	20	ND	4.0	7.3	17.6	8,980	7.5	9.8	26.8	7.3

Shaded Box Indicates Value is Greater Than One Order of Magnitude Above Background.

Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Subsurface Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
	30	ND	ND	6.3	11.8	6,270	5.2	8.5	19.7	7.2
	40	ND	7.4	31	47.1	29,400	32.1	19.6	81.0	7.0
RS04	1	7.2	4.8	63.5	152	15,900	21.2	2,410	1,230	7.9
	3	ND	138	26.1	276	20,000	28.0	20.0	333	8.6
	5	0.80	ND	34.4	259	19,800	30.2	59.2	366	8.8
	10	ND	8.2	16	26.4	17,200	16.3	7.7	49.5	7.8
	15	ND	2.1	15.5	26.5	15,400	15.0	5.3	41.2	8.1
	20	ND	4.4	4.2	9.7	4,480	ND	ND	14.4	8.4
	30	ND	1.6	5.8	10.5	6,090	5.3	5.5	19.6	7.3
	40	ND	12.2	27.1	52.4	24,200	25.5	23.6	78.4	7.0
RS05	1	ND	ND	177	25.2	1,530	9.6	12.4	14.1	8.9
	3	ND	ND	64.0	81.5	18,300	25.8	898	89.5	8.6
	5	21.3	ND	383	276	11,400	95.5	228	360	8.8
	10	2.6	ND	155	138	17,800	58.6	194	376	8.6
	15	ND	ND	20.1	22.1	18,800	17.3	ND	40.4	7.6
	20	ND	ND	8.1	9.3	10,600	7.7	ND	20	6.9
	30	ND	ND	12.8	14.0	10,900	9.3	ND	26.9	7.5
	40	ND	ND	31.4	45.8	30,300	33.7	13.0	74.1	8.3
RS06	1	2.0	ND	279	1,050	30,200	536	33.5	49.8	8.6
	3	1.7	ND	213	415	18,600	24.4	1,590	300	8.4
	5.5	ND	ND	17.2	26.5	12,800	10.8	13.4	37.6	8.1
	10	ND	ND	27.5	20.2	15,300	13.5	ND	35.3	7.7
	15	ND	ND	13.3	16.1	13,400	12.3	ND	29.8	7.8
	20	ND	ND	7.9	15.0	9,350	7.6	ND	20.4	8.0
	30	ND	ND	17.4	18.9	15,800	13.4	ND	38.8	7.4
	40	ND	ND	28.6	37.9	23,800	25.6	5.3	62.7	7.6
SB01	12	0.69	ND	39.6	159	23,400	37.7	184	711	7.2

Shaded Box Indicates Value is Greater Than One Order of Magnitude Above Background.
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth
ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Subsurface Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
	15	ND	ND	23.0	37.9	21,400	21.6	5.7	53.6	7.5
	20.5	ND	ND	7.3	9.8	7,700	5.9	ND	18.7	7.9
	30 5	ND	ND	17.1	23.7	18,300	16.7	5.5	46.1	7.5
	40	ND	ND	24.6	41.2	22,900	23.3	10.8	65 4	8.4
SB02	1	40.9	29.4	1190	7,560	49,700	1,000	14,800	30,800	6.7
	5	9.8	13.2	109	1,480	12,600	246	1,430	8,840	8.8
	10	21.4	ND	272	16,400	26,300	936	2,850	14,900	6.8
	15	ND	ND	22.7	31.4	20,200	20.8	6.0	52.7	7.7
	20.5	ND	ND	9.0	11.2	8,530	6 9	8.2	30.9	7.6
	30	ND	ND	20.0	29.3	20,400	19.6	ND	54.7	5 0
	40.5	ND	ND	34.4	44.2	30,200	31.6	12.5	81.1	7.2
SB03	5	ND	ND	33 5	24.6	28,200	78.5	ND	6,040	7.3
	10	ND	ND	46.6	35.2	32,100	31.9	15.0	120	7.5
	15.5	ND	ND	44.5	39.0	30,200	31.5	20.6	157	7.6
	20	ND	ND	7.8	8.5	9,720	16.7	ND	1,460	5.3
	30	1.5	ND	20.3	31.5	18,700	49.0	9.0	4,490	4.6
	40	ND	ND	22.1	29.1	19,500	20.5	6.2	69.0	7.8
SB04	6	0.30	ND	65.0	120.0	13,000	12.0	29.0	59.0	11.41
	16	0.10	12.2	160	33.0	8,400	8.1	2.0	25.0	5.34
	21	0.13	12.6	120	27.0	5,700	6.9	0.84	22.0	4.79
	25.5	0.07	51.1	400	32.0	6,900	6.2	1.0	16.0	4.32
	31	0.06	11.9	810	94.0	9,700	11.0	1.7	30.0	3.78
	36	0.07	11.8	80.0	90.0	5,200	7.2	0.66	16.0	4.76
	49	0.25	26.9	75.0	720	6,100	41.0	0.85	81.0	4.95
SB05	5.5	1.3	ND	400	520	25,000	46.0	110	380	10.93
	10.5	ND	4.47	720	47	16,000	9.9	2.7	120	7.96
	15.5	ND	7.27	1,200	57	16,000	12	3.1	190	4.69

Shaded Box Indicates Value Is Greater Than One Order of Magnitude Above Background.

Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

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TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Subsurface Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
	20.5	ND	2.68	410	57	12,000	11	2.0	240	4.61
	25.5	ND	3.65	920	160	20,000	20	3.0	260	4.21
	30	0.5	3.02	350	160	15,000	24	3.6	360	4.07
	35.5	0.1	ND	110	40	9,200	6.0	0.94	68	4.52
	45.5	ND	3.26	220	120	8,100	13	4.4	40	4.70
SB06	6	0.8	1.84	310	230	48,000	24	58	130	9.78
	11	1.3	ND	940	140	35,000	22	8.5	36	3.08
	15.5	0.3	ND	280	23	15,000	5.0	2.8	8.2	3.24
	21	0.18	ND	46	15	7,100	3.0	3.3	4.7	3.14
	25.5	0.30	ND	48	22	14,000	4.3	5.1	4.5	3.24
	31	0.37	ND	44	280	18,000	55	3.7	41	3.30
	37	0.12	ND	7.0	29	13,000	5.8	0.87	10	3.87
	46	0.13	ND	6.1	64	8,000	15	12	19	3.77
SB07	3	1.9	73.2	8,030	6,490	27,300	247	860	1,010	7.5
	5.5	ND	1,040	12,000	448	57,000	12.9	180	27.1	4.2
	10.5	ND	216	5,540	2,590	28,300	134	11.7	86.3	3.7
	15.5	ND	312	2,200	2,470	20,400	47.0	ND	62.6	3.9
	20.5	ND	906	7,130	1,400	12,800	45.4	ND	45.8	3.9
	30.5	ND	330	2,700	1,650	20,500	74.2	11.6	75.2	3.3
	40.5	6.4	1,160	979	65.6	26,100	25.7	7.1	60.3	6.5
SB08	5	ND	ND	26.5	2,900	39,000	905	236	360	2.6
	10.5	ND	ND	47.4	704	41,400	405	14.7	171	3.5
	15.5	ND	ND	5.9	782	6,890	44.7	ND	24.8	4.1
	20.5	ND	ND	7.5	152	10,100	118	ND	37.8	3.0
	30.5	ND	ND	18.0	38.8	18,900	19.2	ND	48.4	7.0
	40.5	ND	ND	37.2	66.9	35,600	35.4	21.0	83.3	8.6
UST-SB02	11/10	NA	NA	NA	NA	NA	NA	NA	NA	7.45

Shaded Box Indicates Value is Greater Than One Order of Magnitude Above Background.
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth
ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Subsurface Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
	16 5/15	NA	NA	NA	NA	NA	NA	NA	NA	7.98
UST-SBO3	25/23	NA	NA	NA	NA	NA	NA	NA	NA	8.22
	40 5/36 8	NA	NA	NA	NA	NA	NA	NA	NA	7.75
UST-SB04	20/18.4	NA	NA	NA	NA	NA	NA	NA	NA	8.62
	35/32.2	NA	NA	NA	NA	NA	NA	NA	NA	8.35
UST-SB05	5.5	NA	NA	NA	NA	NA	NA	NA	NA	7.81
UST-SB07	5.5/4.5	NA	ND	22.1	NA	NA	NA	NA	NA	NA
	17/15	NA	ND	12.3	NA	NA	NA	NA	NA	NA
	40/34.5	NA	ND	27.9	NA	NA	NA	NA	NA	NA

FILE NAME: NSOLMETD.WK1

Shaded Box Indicates Value is Greater Than One Order of Magnitude Above Background.
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth
ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-4
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Arsenic, Cyanide and Mercury Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Arsenic EPA-7060	Cyanide Total EPA-9010	Cyanide Amenable EPA-9010	Mercury EPA-7471
SURFACE SOIL SAMPLES					
DD04	1-2	7.60	ND	NA	ND
DD05	1-2	10.40	ND	ND	ND
DD06	1-2	15.00	ND	NA	0.19
PL-HB01	0.5-1	5.70	0.72	0.72	ND
	3-4	8.40	ND	ND	ND
	5-6	9.00	ND	ND	ND
WMU18/19	1-2	7.60	ND	*	ND
	3-4	19.00	ND	*	ND
	5-6	13.00	ND	*	ND
ACTIVE SUMP SLUDGE SAMPLES					
WMU36B	2.5	5.50	ND	ND	0.22
SUBSURFACE SOIL SAMPLES					
FeCl-SB04	1	ND	ND	ND	ND
	5	ND	ND	ND	ND
	11.5	ND	ND	ND	ND
MW15D	19.5	ND	ND	ND	ND
	62.5	ND	ND	ND	NA
	105.5	ND	ND	ND	NA
	125.5	ND	ND	ND	NA
PI01	2.5	72.00	ND	ND	0.35
	3	21.00	ND	ND	NA
	7	5.30	ND	ND	NA
	12	8.80	ND	ND	NA
	17	3.30	ND	ND	ND
	21.5	3.70	ND	ND	NA
	27	7.40	ND	ND	NA
	37	19.20	0.83	0.79	ND
RS06	20	2.80	NA	NA	NA
SB02	1.5	58.00	1.50	ND	0.88
	5	ND	ND	ND	NA
	10	ND	ND	ND	NA
	15.5	8.80	ND	ND	0.28
	20.5	ND	ND	ND	NA
	30	ND	ND	ND	NA
	40.5	ND	ND	ND	ND
SB07	3.5	15.00	1.30	ND	1.50
	5.5	ND	ND	ND	NA
	10.5	ND	ND	ND	NA

ND = Parameter Not Detected NA = Parameter Not Analyzed
* Sample Not Analyzed Due to Matrix Interference and Non-Detection of Total Cyanide

TABLE 4-4
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Arsenic, Cyanide and Mercury Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Arsenic EPA-7060	Cyanide Total EPA-9010	Cyanide Amenable EPA-9010	Mercury EPA-7471
	15.5	ND	ND	ND	NA
	20.5	ND	ND	ND	NA
	30.5	ND	ND	ND	ND
	40	31.00	ND	ND	0.59
	40.5	ND	ND	ND	NA
SB08	5	ND	ND	ND	ND
	10.5	ND	ND	ND	NA
	15.5	ND	ND	ND	ND
	20.5	ND	ND	ND	ND
	30.5	ND	ND	ND	NA
	40.5	ND	ND	ND	ND
UST SB07	5.5	4.9	ND	ND	ND
	17	4.1	ND	ND	ND
	40.5	18	ND	ND	ND

FILE NAME: NSOLCAM.WK1

ND = Parameter Not Detected NA = Parameter Not Analyzed

* Sample Not Analyzed Due to Matrix Interference and Non-Detection of Total Cyanide

REVISED 3-10-92

TABLE 4-5
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Purgeable Halocarbons Analytical Results
(ug/kg)

Soil Boring	Depth (Feet)	Tri-chloro-ethene (TCE)	Tetra-chloro-ethene (PCE)	1,1-Di-chloro-ethene (1,1-DCE)	1,1-Di-chloro-ethane (1,1-DCA)	Total 1,2-Di-chloro-ethene (1,2-DCE)	1,1,1-Tri-chloro-ethane (1,1,1-TCA)	Chloroform (CHCL3)	Methylene chloride (CH2CL2)	Acetone	2-Butanoe
SURFACE SOIL SAMPLES											
WMU18/19	1-2	9	ND	ND	ND	ND	ND	ND	ND	ND	ND
	3-4	ND	ND	ND	ND	ND	ND	ND	ND	120	ND
WMU20B	2 2	2600	ND	ND	ND	ND	ND	ND	ND	NA	NA
WMU46E	3.5	ND	ND	ND	ND	ND	ND	ND	28	ND	ND
ACTIVE SUPM SLUDGE SAMPLES											
WMU36B	2.5	ND	ND	ND	ND	ND	ND	ND	ND	210	ND
SUBSURFACE SOIL SAMPLES											
FeCl-SB04	0.5	ND	ND	ND	ND	ND	ND	ND	9.0	ND	ND
	5.5	110	11	ND	ND	6	ND	ND	10	38	11
	11	ND	ND	ND	ND	ND	ND	ND	8	ND	ND
MW12D	4	110	10	ND	ND	ND	ND	ND	ND	ND	ND
	45	54	ND	ND	7	ND	ND	ND	6	ND	ND
PI01	3	ND	ND	ND	ND	ND	ND	ND	26	60	ND
	7	ND	ND	ND	ND	ND	ND	ND	11	ND	ND
	27	6	ND	ND	8	ND	ND	ND	8	ND	ND
	36.5	ND	ND	ND	6.0	ND	ND	ND	14	ND	ND
PI04	21.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	13
RS06	3	110000	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB02	1.5	ND	ND	ND	ND	ND	ND	ND	31	ND	ND
	5.5	ND	ND	ND	ND	ND	ND	ND	13	ND	ND
	10.5	ND	ND	ND	ND	ND	ND	ND	120	20	10
	15.5	ND	ND	ND	ND	ND	ND	ND	29	ND	ND
	20 5	ND	ND	ND	ND	ND	ND	ND	26	ND	ND
	30.5	ND	ND	ND	ND	ND	ND	ND	6	ND	ND

*Analyses by EPA 8010, all others by EPA 8240
ND = Parameter Not Detected
NA = Parameter Not Analyzed
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

TABLE 4-5
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Purgeable Halocarbons Analytical Results
(ug/kg)

Soil Boring	Depth (Feet)	Tri-chloro-ethene (TCE)	Tetra-chloro-ethene (PCE)	1,1-Di-chloro-ethene (1,1-DCE)	1,1-Di-chloro-ethane (1,1-DCA)	Total 1,2-Di-chloro-ethene (1,2-DCE)	1,1,1-Tri-chloro-ethane (1,1,1-TCA)	Chloroform (CHCL3)	Methylene chloride (CH2CL2)	Acetone	2-Butanoe
	40	ND	ND	ND	ND	ND	ND	ND	6	ND	ND
SB04	6*	90	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB05	5 5*	125	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB07	3.5	4800	ND	ND	650	ND	ND	510	510	ND	ND
	5	910	310	ND	ND	ND	1400	ND	ND	ND	ND
	10	260	58	ND	84	59	550	62	350	ND	ND
	15	62	ND	ND	ND	ND	78	45	430	90	ND
	20	4300	1200	ND	ND	ND	2900	ND	ND	ND	ND
	30	ND	ND	ND	ND	ND	ND	38	460	710	ND
	40	ND	ND	ND	ND	ND	ND	96	200	990	ND
SB08	10	ND	ND	ND	ND	ND	ND	ND	40	ND	ND
	15	ND	ND	ND	ND	ND	ND	ND	26	ND	ND
	20	ND	ND	ND	ND	ND	ND	ND	55	ND	ND
	40	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
UST-SB07	17/15*	ND	ND	ND	ND	ND	ND	ND	1100	ND	ND
	40.5/35*	ND	ND	ND	ND	ND	ND	ND	290	ND	ND

FILE NAME: NSOLCHL.WK1

*Analyses by EPA 8010, all others by EPA 8240
ND = Parameter Not Detected
NA = Parameter Not Analyzed
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

TABLE 4-6
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
PCB's & Semi-Volatile Analytical Results
(ug/kg)

Soil Boring	Depth (Feet)	Aroclor 1260 EPA-8080	Aroclor 1254 EPA-8080	2-Methyl-naph-thalene EPA-8270	1,2,4-Tri-chloro-benzene EPA-8270	Di-n-butyl-phthal-ate EPA-8270	bis (2-Ethyl-hexyl)-phthal-ate EPA-8270	Pyrene EPA-8270
SURFACE SOIL SAMPLES								
DD01	1-2	880	ND	NA	NA	NA	NA	NA
DD02	1-2	ND	ND	ND	ND	ND	ND	ND
DD04	1-2	ND	ND	ND	ND	ND	ND	ND
DD05	1-1.5	ND	ND	ND	ND	400	ND	ND
DD06	1-1.5	200	ND	ND	ND	ND	410	ND
LAB-HB01	0 5-1	4,200	ND	NA	NA	NA	NA	NA
	1-2	430	ND	NA	NA	NA	NA	NA
	3-4	90	ND	NA	NA	NA	NA	NA
PL-HB01	0.5-1	3,000	ND	ND	ND	ND	ND	ND
	5-6	17	ND	ND	ND	ND	ND	ND
WMU18/19	1-2	3,900	ND	ND	ND	ND	ND	1,300
SLUDGE SAMPLES								
WMU36B	2.5	ND	16	ND	ND	ND	4,300	ND
SUBSURFACE SOIL SAMPLES								
FeCl-SB02	1	21,000	ND	NA	NA	NA	NA	NA
	5	80,000	ND	NA	NA	NA	NA	NA
	11.5	60	ND	NA	NA	NA	NA	NA
FeCl-SB03	1	23,000	ND	NA	NA	NA	NA	NA
	5	15,000	ND	NA	NA	NA	NA	NA
FeCl-SB04	0.5	11,000	ND	ND	ND	ND	ND	ND
	5.5	4,400	ND	ND	1,200	ND	ND	ND
FeCl-SB06	1	50,000	ND	NA	NA	NA	NA	NA
	5.5	6,500	ND	NA	NA	NA	NA	NA
FeCl-SB07	5	4,000	ND	NA	NA	NA	NA	NA
	11	ND	100	NA	NA	NA	NA	NA
PI01	2	1,100	ND	NA	NA	NA	NA	NA
SB07	3.5	1,700	ND	ND	ND	ND	ND	ND
SB08	5 5	ND	ND	26,000	ND	ND	ND	ND

FILE NAME: SOLSEMI.WK1

ND = Parameter Not Detected
NA = Parameter Not Analyzed

TABLE 4-7
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Purgeable Aromatic and UST Investigation Analytical Results
(mg/kg unless otherwise noted)

Soil Borings	Depth (Feet)	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	Total Organic Carbon EPA-9060	Total Organic Solids EPA-160.3	TPH (Extractable) EPA-8015M	TPH (Volatile) EPA-8015M	Soil Moisture (%) ASTM-D2216-80	Bulk Density (g/cc) ASTM-C559-79
SURFACE SOIL SAMPLES											
DD02	2	ND	ND	ND	ND	NA	NA	5400	NA	NA	NA
RR05	1-2	ND	ND	ND	ND	4750	NA	NA	NA	NA	NA
UST-HB01	17*	1	3	0.4	6	NA	NA	16000	ND	NA	NA
UST-HB02	18*	2	37	6	310	NA	NA	3200	ND	NA	NA
UST-HB03	17*	1	7	0.6	11	7130	NA	5700	150	6	1.6
UST-HB04	16.5*	1	7	ND	13	NA	NA	4100	ND	NA	NA
UST-HB05	18*	5	17	1	45	18950	NA	5300	230	11	1.7
WMU18/19	1-2	ND	ND	0.009	0.01	NA	NA	NA	NA	NA	NA
WMU20B	2.2	ND	ND	ND	ND	3.71	NA	NA	NA	NA	NA
WMU23B	1.5*	ND	ND	ND	ND	NA	NA	4000	ND	NA	NA
WMU35B	7*	ND	ND	ND	ND	NA	NA	1000	NA	NA	NA
WMU42	4.5*	ND	ND	ND	ND	NA	NA	16400	ND	NA	NA
WMU46A	4*	ND	ND	ND	ND	44260	NA	8500	NA	NA	NA
WMU46B	10.5*	ND	ND	ND	ND	2650	NA	200	NA	NA	NA
	20*	ND	ND	ND	ND	3210	NA	3100	NA	NA	NA
	30*	ND	ND	ND	ND	1920	NA	520	NA	NA	NA
	35*	ND	ND	0.026	ND	1250	NA	ND	NA	NA	NA
WMU46C	2	ND	ND	ND	ND	8140	NA	NA	NA	NA	NA
WMU46D	3.5	ND	ND	0.26	ND	NA	1.3	NA	NA	NA	NA
WMU46E	3.5	ND	ND	0.33	ND	NA	1.5	NA	NA	NA	NA
	15*	ND	ND	0.0098	ND	NA	NA	ND	NA	NA	NA
	25*	ND	ND	0.028	ND	NA	NA	ND	NA	NA	NA

*Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8020, no asterisk indicate Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8240
ND = Parameter Not Detected
NA = Parameter Not Analyzed
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

TABLE 4-7
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Purgeable Aromatic and UST Investigation Analytical Results
(mg/kg unless otherwise noted)

Soil Borings	Depth (Feet)	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	Total Organic Carbon EPA-9060	Total Organic Solids EPA-160.3	TPH (Extractable) EPA-8015M	TPH (Volatile) EPA-8015M	Soil Moisture (%) ASTM-D2216-80	Bulk Density (g/cc) ASTM-C559-79
ACTIVE SUMP SLUDGE SAMPLES											
WMU36B	2.5	ND	0.006	0.057	0.033	NA	NA	NA	NA	NA	NA
SUBSURFACE SOIL SAMPLES											
FeCl-SB04	0.5	ND	ND	0.079	ND	NA	NA	NA	NA	NA	NA
	5.5	ND	ND	0.10	0.22	NA	NA	NA	NA	NA	NA
	11	ND	ND	0.04	ND	NA	NA	NA	NA	NA	NA
MW06D	10.5	ND	ND	0.31	ND	NA	0.31	NA	NA	NA	NA
	25.5	ND	ND	0.15	ND	NA	0.25	NA	NA	NA	NA
MW12D	4	ND	ND	ND	ND	6260	NA	NA	NA	NA	NA
MW12D	45	ND	ND	ND	ND	1240	NA	NA	NA	NA	NA
MW13S	20	ND	ND	ND	ND	383	NA	NA	NA	NA	NA
MW14S	5	ND	ND	ND	ND	8570	NA	NA	NA	NA	NA
	49.5	ND	ND	0.01	ND	2850	NA	NA	NA	NA	NA
PI01	2	ND	0 06	1.3	0.41	NA	NA	NA	NA	NA	NA
	3	ND	ND	0.048	ND	NA	NA	NA	NA	NA	NA
PI04	21.5	ND	ND	ND	ND	737	NA	NA	NA	NA	NA
RS06	3	ND	9	ND	43	NA	NA	460	NA	NA	NA
	20	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
SB02	1.5	ND	ND	0.041	ND	NA	NA	NA	NA	NA	NA
	5.5	ND	ND	0.005	ND	NA	NA	NA	NA	NA	NA
	10.5	ND	ND	0.022	ND	NA	NA	NA	NA	NA	NA
	15.5	ND	ND	0.012	ND	NA	NA	NA	NA	NA	NA
	20	ND	ND	0.019	ND	NA	NA	NA	NA	NA	NA
	30.5	ND	ND	0.007	ND	NA	NA	NA	NA	NA	NA

*Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8020, no asterisk indicate Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8240
ND = Parameter Not Detected
NA = Parameter Not Analyzed
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

TABLE 4-7
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Purgeable Aromatic and UST Investigation Analytical Results
(mg/kg unless otherwise noted)

Soil Borings	Depth (Feet)	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	Total Organic Carbon EPA-9060	Total Organic Solids EPA-160.3	TPH (Extractable) EPA-8015M	TPH (Volatile) EPA-8015M	Soil Moisture (%) ASTM-D2216-80	Bulk Density (g/cc) ASTM-C559-79
	40	ND	ND	0.011	ND	NA	NA	NA	NA	NA	NA
SB04	6*	ND	ND	0.065	ND	3880	NA	NA	NA	NA	NA
	16*	ND	ND	ND	ND	420	NA	NA	NA	NA	NA
	21	NA	NA	NA	NA	170	NA	NA	NA	NA	NA
	25.5	NA	NA	NA	NA	170	NA	NA	NA	NA	NA
	31	NA	NA	NA	NA	450	NA	NA	NA	NA	NA
	36*	ND	ND	0.05	ND	130	NA	NA	NA	NA	NA
	49*	ND	ND	ND	ND	210	NA	NA	NA	NA	NA
SB05	5.5*	ND	0.07	0.34	0.21	6400	NA	NA	NA	NA	NA
	10.5	ND	ND	ND	ND	1900	NA	NA	NA	NA	NA
	15 5*	0.7	ND	ND	ND	1400	NA	NA	NA	NA	NA
	20 5	NA	NA	NA	NA	570	NA	NA	NA	NA	NA
	25.5	NA	NA	NA	NA	810	NA	NA	NA	NA	NA
	30.5	NA	NA	NA	NA	480	NA	NA	NA	NA	NA
	35.5*	ND	ND	0.05	ND	140	NA	NA	NA	NA	NA
	45 5*	ND	ND	ND	ND	310	NA	NA	NA	NA	NA
SB06	6*	ND	ND	0.38	ND	9900	NA	NA	NA	NA	NA
	11	NA	NA	NA	NA	920	NA	NA	NA	NA	NA
	15.5	NA	NA	NA	NA	460	NA	NA	NA	NA	NA
	21	NA	NA	NA	NA	320	NA	NA	NA	NA	NA
	25.5	NA	NA	NA	NA	170	NA	NA	NA	NA	NA
	31	ND	ND	ND	ND	560	NA	NA	NA	NA	NA
	37	ND	ND	ND	ND	230	NA	NA	NA	NA	NA
	46	ND	ND	ND	ND	710	NA	NA	NA	NA	NA

*Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8020, no asterisk indicate Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8240
ND = Parameter Not Detected
NA = Parameter Not Analyzed
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

TABLE 4-7
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Purgeable Aromatic and UST Investigation Analytical Results
(mg/kg unless otherwise noted)

Soil Borings	Depth (Feet)	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	Total Organic Carbon EPA-9060	Total Organic Solids EPA-160.3	TPH (Extractable) EPA-8015M	TPH (Volatile) EPA-8015M	Soil Moisture (%) ASTM-D2216-80	Bulk Density (g/cc) ASTM-C559-79
SB07	10	ND	ND	0.086	ND	NA	NA	NA	NA	NA	NA
	15	ND	ND	0.029	ND	NA	NA	NA	NA	NA	NA
	20	ND	0.25	ND	0.76	NA	NA	2300	NA	NA	NA
SB08	5.5	ND	3.3	0.4	ND	NA	NA	4200	NA	NA	NA
	10	ND	ND	0.13	0.056	NA	NA	1500	NA	NA	NA
	15	ND	ND	0.09	ND	NA	NA	NA	NA	NA	NA
	20	ND	0.074	0.054	ND	NA	NA	1500	ND	NA	NA
	30	ND	ND	ND	ND	NA	NA	10	ND	NA	NA
	40	ND	ND	0.011	ND	NA	NA	ND	NA	NA	NA
UST-SB01	11/10*	ND	5	ND	14	NA	NA	2100	ND	NA	NA
	21.5/19*	ND	4	ND	10	NA	NA	2100	ND	NA	NA
	31.5/28*	ND	ND	ND	ND	NA	NA	28	ND	NA	NA
	36/32*	ND	0.1	ND	0.2	NA	NA	93	ND	NA	NA
	41.5/37*	ND	ND	ND	ND	NA	NA	17	ND	NA	NA
UST-SB02	11/10*	2.1	ND	ND	ND	23100	NA	NA	NA	15	2.1
	11 5/10*	ND	4	ND	8	NA	NA	1200	ND	NA	NA
	16.5/15*	1.9	ND	ND	ND	26600	NA	ND	NA	13	1.9
	20 5/18*	ND	13	ND	21	NA	NA	1900	NA	NA	NA
	30.5/27*	0.3		ND	2	NA	NA	3500	NA	NA	NA
	35.5/31.5*	ND	ND	ND	ND	NA	NA	24	NA	NA	NA
	40.5/36*	ND	ND	ND	ND	NA	NA	9	NA	NA	NA
UST-SBO3	10.5/10*	0.2	0.7	0.3	2	NA	NA	1900	55	NA	NA
	20.5/19*	0.2	1	0.3	2	NA	NA	1400	42	NA	NA
	25.5/23*	1.5	ND	ND	ND	NA	NA	NA	NA	5	1.5

*Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8020, no asterisk indicate Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8240

ND = Parameter Not Detected

NA = Parameter Not Analyzed

Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

TABLE 4-7
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
Purgeable Aromatic and UST Investigation Analytical Results
(mg/kg unless otherwise noted)

Soil Borings	Depth (Feet)	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	Total Organic Carbon EPA-9060	Total Organic Solids EPA-160.3	TPH (Extractable) EPA-8015M	TPH (Volatile) EPA-8015M	Soil Moisture (%) ASTM-D2216-80	Bulk Density (g/cc) ASTM-C559-79
	30.5/28*	3	20	4	20	NA	NA	9900	160	NA	NA
	35/33*	5	29	3	23	NA	NA	3900	210	NA	NA
	40 5/37*	1.7	ND	ND	ND	950	NA	ND	3	21	1.7
UST-SBO4	11/10*	2	11	3	27	NA	NA	3900	150	NA	NA
	20/18 5*	1.6	ND	ND	ND	660	NA	NA	NA	5	1.6
	20 5/18 5*	1	12	1	28	NA	NA	1800	100	NA	NA
	30/27.5*	3	16	5	32	NA	NA	2100	180	NA	NA
	35/32*	1 5	ND	ND	ND	1100	NA	NA	NA	17	1.5
	35 5/32*	ND	0.3	ND	0.8	NA	NA	420	24	NA	NA
	40/37*	ND	ND	ND	ND	NA	NA	ND	2	NA	NA
UST-SB05	5.5*	1.7	ND	ND	9	20700	NA	2000	ND	12	1.7
	10 5*	ND	ND	ND	3	NA	NA	550	ND	NA	NA
	20*	ND	ND	0.2	2	NA	NA	3900	ND	NA	NA
	30.5*	ND	0.6	ND	ND	NA	NA	18	ND	NA	NA
UST-SB06	5 5*	ND	ND	ND	ND	37700	NA	7400	NA	NA	NA
	10*	ND	ND	ND	ND	7010	NA	3100	NA	NA	NA
	20*	ND	ND	ND	ND	2460	NA	2000	NA	NA	NA
	30*	ND	ND	ND	ND	2060	NA	ND	NA	NA	NA
	35*	ND	ND	0.024	ND	2160	NA	ND	NA	NA	NA
UST-SB07	5/4.5*	ND	ND	ND	ND	48500	NA	3800	NA	NA	NA
	9.5/8*	ND	ND	ND	ND	15800	NA	1500	NA	NA	NA
	17.5/15*	ND	14	ND	ND	74600	NA	17000	NA	NA	NA
	32.5/28*	ND	ND	ND	ND	6390	NA	3900	NA	NA	NA
	40/34.5*	ND	ND	ND	ND	4750	NA	530	NA	NA	NA

*Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8020, no asterisk indicate Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8240
ND = Parameter Not Detected
NA = Parameter Not Analyzed
Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

TABLE 4-7

SOUTHERN CALIFORNIA CHEMICAL

RCRA Facility Investigation Soil Sampling

Purgeable Aromatic and UST Investigation Analytical Results

(mg/kg unless otherwise noted)

Soil Borings	Depth (Feet)	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	Total Organic Carbon EPA-9060	Total Organic Solids EPA-160.3	TPH (Extractable) EPA-8015M	TPH (Volatile) EPA-8015M	Soil Moisture (%) ASTM-D2216-80	Bulk Density (g/cc) ASTM-C559-79
	45/39*	ND	ND	ND	ND	2040	NA	ND	NA	NA	NA
UST-SB09	10 5*	ND	ND	ND	ND	2190	NA	ND	NA	NA	NA
	20*	ND	ND	ND	ND	907	NA	ND	NA	NA	NA
	30*	ND	ND	0.016	ND	1650	NA	ND	NA	NA	NA
	35*	ND	ND	ND	ND	1590	NA	ND	NA	NA	NA
UST-SB10	10*	ND	ND	ND	ND	11700	NA	3700	NA	NA	NA
	20*	ND	ND	ND	ND	2540	NA	1500	NA	NA	NA
	30*	ND	ND	0.0098	ND	1940	NA	ND	NA	NA	NA
	35*	ND	ND	0.014	ND	2600	NA	ND	NA	NA	NA
UST-SB11	10*	ND	ND	ND	ND	14600	NA	2900	NA	NA	NA
	20*	ND	1	0.12	1.2	3660	NA	1900	NA	NA	NA
	30*	ND	ND	0.016	ND	1690	NA	110	NA	NA	NA
	35*	ND	ND	0.019	ND	2280	NA	ND	NA	NA	NA

FILE NAME: SOLUST2.WK1

*Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8020, no asterisk indicate Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8240

ND = Parameter Not Detected

NA = Parameter Not Analyzed

Note: Where soil depths are listed as A/B, A = slant boring depth, and B = actual boring depth

TABLE 4-8
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Soil Sampling
TCLP Analytical Results
(mg/L)

Soil Boring	Depth (Feet)	Chromium (Hexavalent) EPA-7196-L	Chromium (Total) EPA-6010-L	Iron EPA-6010-L	Zinc EPA-6010-L
SUBSURFACE SOIL SAMPLES					
FeCl-SB04	1	ND	ND	0.13	ND
MW15D	62.5	ND	ND	ND	0.20
P101	12	1.0	0.12	ND	ND
SB02	1	ND	ND	ND	5.2
SB07	40.5	9.4	0.92	ND	ND

FILE NAME: SOLTCLP.WK1

ND = Parameter Not Detected
NA = Parameter Not Analyzed
Note: Total Chromium is less than Hexavalent Chromium due to a lower mobility than Hexavalent Chromium.

TABLE 4-9
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Surface Soil Sampling
DHS Metals and PCB Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Arsenic EPA-6010	Barium EPA-6010	Cadmium EPA-6010	Chromium (Total) EPA-6010	Copper EPA-6010	Molybdenum EPA-6010	Nickel EPA-6010	Lead EPA-6010	Vanadium EPA-6010	Zinc EPA-6010	PCB 1260 EPA-8080
SPRR-01	0.5 - 1	<50	150	7	720	1500	<50	<50	560	<50	1300	680
SPRR-02	0.5 - 1	<50	150	5	1100	1200	160	83	470	<50	1100	1500
SPRR-03	0.5 - 1	<50	160	<5	<50	90	<50	<50	<50	83	210	54
SPRR-04	0.5 - 1	<50	130	<5	530	1100	90	55	310	50	690	970
SPRR-05	0.5 - 1	<50	<50	<5	250	430	<50	<50	230	55	480	770
SPRR-06	0.5 - 1	<50	150	<5	<50	550	<50	<50	220	55	310	160
SPRR-07	0.5 - 1	<50	200	<5	270	500	85	60	460	60	410	180
SPRR-08	0.5 - 1	<50	183	<5	<50	<50	<50	<50	<50	75	75	<0.5
SPRR-09	0.5 - 1	<50	115	<5	<50	110	<50	55	310	<50	240	ND
SPRR-10	0.5 - 1	<50	55	<5	<50	50	<50	<50	<50	<50	55	6.3
SPRR-11	0.5 - 1	<50	170	<50	65	220	<50	<50	<50	75	120	3.6
SPRR-12	0.5 - 1	<50	150	<50	<50	75	<50	<50	<50	<50	93	1.7
SPRR-13	0.5 - 1	<50	180	<50	90	530	<50	90	80	90	510	100
SPRR-14	0.5 - 1	95	95	<50	<50	170	<50	<50	155	<50	150	9.8
SPRR-15	0.5 - 1	<50	70	<50	<50	<50	<50	<50	<50	<50	100	<0.5
SPRR-16	0.5 - 1	<50	130	<50	50	160	<50	<50	150	59	250	1.0
SPRR-17	0.5 - 1	<50	120	<50	<50	56	<50	<50	<50	60	110	1.3
SPRR-18	0.5 - 1	280	70	<50	90	340	<50	<50	110	<50	170	9.2
SPRR-19	0.5 - 1	<50	140	<50	<50	60	<50	<50	<50	<50	65	ND
SPRR-20	0.5 - 1	70	60	<50	60	140	<50	<50	50	<50	120	0.7
SCCDM-1	0.5 - 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	180
SCCDM-2	0.5 - 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	710
SCCDM-3	0.5 - 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	450
SCCDM-4	0.5 - 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	660
SCCDM-11	0.5 - 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15
SCCDLR-1	0.5 - 1	<22	170	<22	1500	770	<44	70	490	<44	480	260
SCCDLR-2	0.5 - 1	<25	220	<25	1200	2100	<25	130	620	34	1300	190
SCCDLR-3	0.5 - 1	<23	140	<23	660	400	<23	35	230	36	370	120

TABLE 4-9
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Surface Soil Sampling
DHS Metals and PCB Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Arsenic EPA-6010	Barium EPA-6010	Cadmium EPA-6010	Chromium (Total) EPA-6010	Copper EPA-6010	Molybdenum EPA-6010	Nickel EPA-6010	Lead EPA-6010	Vanadium EPA-6010	Zinc EPA-6010	PCB 1260 EPA-8080
SCCDLR-4	0.5 - 1	44	180	<24	1700	5600	<24	150	1200	<48	1800	69
SCCDLR-5	0.5 - 1	<24	120	<24	220	1400	<24	120	320	<24	510	370
SCCDLR-9	0.5 - 1	<5	40	<5	10	620	<5	10	66	<5	230	1.8
SCCDLR-10	0.5 - 1	<15	50	<15	550	3300	<15	270	160	<15	320	2.8
SCCDLR-11	0.5 - 1	20	100	<5	140	7800	20	390	210	25	600	0.7
SCCDLR-12	0.5 - 1	<43	120	<22	150	2100	<22	260	140	<22	580	0.6
SCCDLR-13	0.5 - 1	50	50	<24	<24	5500	<24	310	200	<24	230	ND

Note: All Samples Collected by DHS Personnel, Analysis by Southern California Laboratory, Hazardous Materials Unit
ND = Parameter Not Detected NA = Samples Not Analyzed for Given Parameters

File Name: DHSMET.WK1
REVISED 3-23-92

TABLE 4-10 SELECTED PARAMETERS COMPARISON FROM JANUARY 1989 TO JANUARY 1991

MONITOR WELL No / Date	ELEVATION Feet	METALS Hexavalent Chromium	Total Chromium	Cadmium	Copper	PURGEABLE AROMATICS Benzene	Toluene	Ethyl-benzene	Total Xylenes	PURG. HALOCARBONS Trichloroethene
MW - 1										
Jan-89	96 74	ND	0 014	ND	ND	ND	ND	ND	ND	19
Apr-89	100 45	ND	0.1	ND	ND	ND	ND	ND	3	23
Jul-89	99	ND	0 06	0 01	0 03	ND	ND	ND	ND	13
Oct-89	98.78	ND	ND	ND	ND	ND	ND	ND	ND	12
Jan 90	97.73	ND	ND	ND	ND	ND	ND	ND	ND	18
Apr-90	99.3	ND	0 02	ND	0 02	ND	ND	ND	ND	20
Jul-90	100.83	ND	ND	ND	0 03	ND	ND	ND	ND	18
Oct 90	99 81	ND	ND	ND	0.023	ND	ND	ND	ND	18
Jan-91	99 19	ND	ND	ND	ND	ND	ND	ND	ND	28
MW - 1D										
Oct-90	99 8	ND	0 012	ND	ND	ND	ND	ND	ND	28
Jan-91	99.2	ND	0 025	ND	ND	ND	ND	ND	ND	33
MW - 2										
Jan-89	95.27	0.017	0.022	ND	ND	ND	ND	ND	ND	60
Apr-89	99.36	ND	0 05	ND	ND	ND	ND	ND	ND	45
Jul-89	98.62	ND	0 06	ND	ND	ND	ND	ND	ND	67
Oct-89	95.3	ND	ND	ND	ND	ND	ND	ND	ND	35
Jan-90	96.46	ND	ND	ND	ND	ND	ND	ND	ND	27
Apr-90	98.06	ND	0 02	ND	ND	ND	ND	ND	ND	38
Jul-90	99.8	ND	ND	ND	0 03	ND	ND	ND	ND	30
Oct-90	99 25	ND	ND	ND	ND	ND	ND	ND	ND	24
Jan-91	98.76	ND	0 01	ND	ND	ND	ND	ND	ND	15
MW - 3										
Jan-89	95.02	ND	ND	ND	ND	7.4	17	4900	1500	74
Apr-89	99.29	ND	0 07	ND	ND	ND	ND	1200	80	110
Jul-89	98.21	ND	0.06	ND	ND	ND	ND	ND	ND	120
Oct-89	94.75	ND	ND	ND	ND	ND	ND	1800	150	<100
Jan-90	95.98	ND	ND	ND	ND	ND	ND	110	ND	65
Apr-90	97.72	ND	ND	ND	ND	ND	ND	2100	720	74
Jul-90	99 27	ND	ND	ND	ND	ND	ND	ND	ND	130
Oct-90	97 29	ND	ND	ND	ND	9	2	ND	ND	130
Jan-91	97.69	ND	ND	ND	ND	ND	ND	ND	ND	38
MW - 4										
Jan-89	95 21	33	400	0.028	ND	ND	10	15	29	120
Apr-89	99.19	43	100	0 05	0 02	ND	23	15	50	280
Jul 89	98.19	120	98	0.08	0.06	ND	ND	140	40	290
Oct-89	94.92	110	120	0.07	ND	ND	ND	ND	ND	250
Jan-90	95 87	109	95 1	0.12	ND	ND	ND	ND	ND	220
Apr-90	97.5	82	80 7	0 13	0.02	ND	ND	ND	ND	280
Jul-90	99 2	100	101	0 35	ND	ND	ND	1600	170	320
Oct-90	98.33	58.9	48.4	0.23	0 022	ND	17	230	650	250
Jan-91	97 88	49.4	65.3	0.26	ND	ND	ND	ND	1200	180
MW - 4A										
Jan-89	95 13	0.01	ND	ND	ND	ND	ND	ND	1.3	6.7
Apr-89	98.28	ND	0.05	ND	ND	ND	ND	ND	ND	7
Jul-89	98.3	ND	0 13	ND	ND	ND	ND	ND	ND	5
Oct-89	95.08	ND	ND	ND	ND	ND	ND	ND	ND	3
Jan-90	96 07	ND	ND	ND	ND	ND	ND	ND	ND	8
Apr 90	97 67	ND	ND	ND	ND	ND	ND	ND	ND	2.7
Jul-90	99 43	ND	ND	ND	0 03	ND	ND	ND	ND	6.1
Oct-90	98 41	ND	0 038	ND	ND	ND	ND	ND	ND	ND
Jan 91	97.75	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 5										
Jan-89	94 14	ND	ND	ND	ND	0.9	ND	ND	ND	5.9
Apr 89	98 31	ND	0 04	ND	ND	ND	ND	ND	ND	85
Jul-89	97 43	ND	0.04	ND	ND	ND	ND	ND	ND	48
Oct-89	94 19	ND	ND	ND	ND	0 8	ND	ND	ND	16
Jan-90	95 19	ND	0 01	ND	ND	ND	ND	ND	ND	18
Apr-90	97 07	ND	ND	ND	ND	ND	ND	ND	ND	24
Jul-90	98 68	ND	ND	ND	ND	ND	ND	ND	ND	61
Oct 90	97 83	ND	ND	ND	ND	ND	ND	ND	ND	14
Jan-91	96 97	ND	ND	ND	ND	ND	ND	ND	ND	
MW - 6B										
Jan 89	95 12	ND	ND	ND	ND	ND	ND	ND	ND	57
Apr 89	99 11	ND	0 06	ND	ND	ND	ND	ND	ND	37
Jul-89	98 39	ND	0.04	ND	ND	ND	ND	ND	ND	29
Oct-89	95 35	ND	ND	ND	ND	ND	ND	ND	ND	29
Jan-90	96.1	ND	ND	ND	ND	ND	ND	ND	ND	46
Apr-90	97 76	ND	0 02	ND	ND	ND	ND	ND	ND	61
Jul 90	99 28	ND	0 02	ND	ND	ND	ND	ND	ND	51
Oct 90	98 45	ND	0.012	ND	ND	ND	ND	ND	ND	62
Jan-91	97 87	ND	ND	ND	ND	ND	ND	ND	ND	59
MW - 6D										
Oct-90	98 52	ND	ND	ND	0.02	ND	ND	ND	ND	100
Jan 91	97.91	ND	ND	ND	ND	ND	ND	ND	ND	78

TABLE 4-10 SELECTED PARAMETERS COMPARISON FROM JANUARY 1989 TO JANUARY 1991

MONITOR WELL No. / Date	GROUNDWATER ELEVATION Feet	METALS Hexavalent Chromium	Total Chromium	Cadmium	Copper	PURGEABLE AROMATICS Benzene	Toluene	Ethyl benzene	Total Xylenes	PURG. HALOCARBONS Trichloroethene
MW - 7										
Jan 89	89 47	ND	ND	ND	ND	ND	1 4	1.2	3.8	35
Apr 89	98 83	ND	0 02	ND	ND	ND	ND	ND	1	47
Jul-89	97 9	ND	0 03	ND	ND	ND	ND	ND	ND	25
Oct 89	94 72	ND	ND	ND	ND	ND	ND	ND	ND	44
Jan-90	95 58	ND	ND	ND	ND	ND	ND	ND	ND	39
Apr-90	97 32	ND	ND	ND	ND	ND	ND	ND	ND	46
Jul 90	98 85	ND	ND	ND	ND	ND	ND	ND	ND	34
Oct 90	98 02	ND	ND	ND	ND	ND	ND	ND	ND	19
Jan-91	97 41	ND	ND	ND	ND	ND	ND	ND	ND	1 8
MW - 8										
Jan-89	94 84	ND	ND	ND	ND	ND	ND	ND	1.8	89
Apr-89	99 08	ND	0 06	ND	ND	ND	ND	ND	ND	23
Jul-89	98.13	ND	0 06	ND	0 02	ND	ND	ND	ND	43
Oct-89	94.9	ND	ND	ND	ND	ND	ND	ND	ND	22
Jan-90	95 75	ND	ND	ND	ND	ND	ND	ND	ND	28
Apr-90	97 51	ND	ND	ND	ND	ND	ND	ND	ND	17
Jul-90	99 08	ND	ND	ND	ND	ND	ND	ND	ND	20
Oct 90	98.51	ND	ND	ND	ND	ND	ND	ND	ND	14
Jan-91	97.93	ND	ND	ND	ND	ND	3	1 7	4.4	
MW - 9										
Jan-89	95.55	0.45	0 33	ND	ND	ND	ND	ND	ND	55
Apr-89	99 67	ND	0.06	ND	ND	ND	ND	ND	ND	24
Jul-89	98 77	ND	0.17	ND	0 02	ND	ND	ND	ND	57
Oct-89	95 82	2.5	1.8	ND	ND	ND	ND	ND	ND	110
Jan-90	96 44	2.28	2.2	ND	ND	ND	ND	ND	ND	100
Apr-90	98 26	0.8	0 81	ND	ND	ND	ND	ND	ND	160
Jul-90	99 76	0 03	0.04	ND	ND	ND	ND	ND	ND	84
Oct-90	98 89	0 25	0.19	ND	0.062	ND	ND	ND	ND	17
Jan-91	98.04	0 124	0.085	ND	ND	ND	6.8	1 4	9	26
MW - 10										
Jan-89	95.71	ND	0.029	ND	ND	ND	ND	9.54	ND	32
Apr-89	99.54	ND	0.08	ND	ND	ND	ND	ND	7	23
Jul 89	98.66	ND	0.11	ND	ND	ND	ND	ND	30	180
Oct-89	95 34	ND	ND	ND	ND	ND	ND	190	ND	70
Jan-90	96 38	ND	ND	ND	ND	ND	ND	210	ND	84
Apr-90	98.1	ND	ND	ND	ND	ND	ND	200	ND	93
Jul-90	99 74	ND	ND	ND	ND	ND	200	8500	1500	240
Oct-90	98 62	ND	ND	ND	ND	ND	330	1300	980	ND
Jan-91	97 98	ND	ND	ND	ND	ND	ND	ND	4000	ND
MW - 11										
Jan-89	95.97	ND	ND	ND	ND	ND	ND	43	1.5	34
Apr-89	99 85	ND	0.04	ND	ND	ND	7500	2600	11000	39
Jul-89	98 95	ND	ND	ND	0.13	ND	ND	ND	90	29
Oct-89	95.77	ND	ND	ND	ND	ND	ND	200	ND	35
Jan-90	96.72	ND	ND	ND	ND	ND	ND	63	ND	48
Apr-90	98.44	ND	ND	ND	ND	ND	2.8	370	150	33
Jul-90	100	ND	ND	ND	0 03	ND	440	1000	780	85
Oct-90	98 97	ND	ND	ND	ND	ND	15000	3000	10000	ND
Jan-91	98 29	ND	ND	ND	ND	ND	15000	4700	12000	ND
MW - 12S										
Oct-90	99 28	ND	ND	ND	ND	ND	ND	11	ND	8.8
Jan 91	98 84	ND	ND	ND	ND	ND	ND	4.5	ND	10
MW - 12D										
Oct-90	99 3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-91	98 7	ND	ND	ND	ND	ND	ND	ND	ND	
MW - 13S										
Oct 90	99 11	ND	ND	ND	ND	ND	ND	ND	ND	2.3
Jan 91	98 5	ND	0 014	ND	ND	ND	ND	ND	ND	7.8
MW - 13D										
Oct-90	99 08	ND	ND	ND	ND	ND	ND	ND	ND	2.8
Jan-91	98 47	ND	ND	ND	ND	ND	ND	ND	ND	1.5
MW - 14S										
Oct-90	98 07	3 2	2.2	0 018	5 3	ND	ND	1750	ND	180
Jan 91	97 38	0 4	0 94	0 007	1	ND	ND	2800	5900	108
MW - 14D										
Oct-90	98 02	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Jan 91	97 41	ND	ND	ND	ND	ND	ND	ND	4	1 8
MW 15S										
Oct 90	97 71	ND	ND	ND	ND	ND	ND	ND	ND	21
Jan-91	97 1	ND	ND	ND	ND	ND	4	1 8	4	13
MW - 15D										
Oct-90	97 59	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-91	96 9	ND	ND	ND	ND	ND	1 3	ND	ND	ND

NOTE Concentrations reported in mg/l for all metals and ug/l for purgeable aromatics/halocarbons.

TABLE 4-

SOUTHERN CALIFORNIA CHEMICAL

October 1990 Quarterly Monitoring Well Sampling

Halogenated Organic Analytical Results *

(µg/L)

Well Identification	Tetra-chloro-ethene (PCE)	Tri-chloro-ethene (TCE)	1,1-Di-chloro-ethene (1,1-DCE)	trans-1,2-Di-chloro-ethene (t1,2-DCE)	1,1,1-Tri-chloro-ethane (TCA)	1,1-Di-chloro-ethane (1,1-DCA)	1,2-Di-chloro-ethane (1,2-DCA)	Carbon tetra-chloride (CCL4)	Chloroform (CHCL3)	Methylene chloride (CH2CL2)	Ethylene Dibromide (EDB)
SCC-MW01	5.0	18	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW01D	6.3	26	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW02	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW03	ND	130	10	ND	ND	ND	ND	150	56	ND	NA
SCC-MW04 **	ND	250	54	ND	ND	80	360	ND	ND	38	0 21
SCC-MW04A **	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW05	ND	14	ND	ND	ND	ND	ND	70	33	ND	NA
SCC-MW06D **	14	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW06B **	10	52	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW07	1.4	19	1.3	3.5	ND	9.0	5.0	ND	ND	ND	NA
SCC-MW08	ND	14	ND	ND	ND	34	14	ND	ND	ND	NA
SCC-MW09	ND	17	4.4	ND	ND	6.5	7.6	ND	ND	ND	NA
SCC-MW10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW12S **	ND	8.6	ND	ND	ND	ND	35	ND	ND	ND	ND
SCC-MW12D **	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW13S	ND	23	ND	ND	ND	1.5	ND	ND	ND	ND	NA
SCC-MW13D	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW14S	ND	180	28	ND	ND	20	48	ND	ND	40	ND
SCC-MW14D	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW15S **	ND	21	ND	ND	ND	ND	16	ND	ND	ND	NA
SCC-MW15D **	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
MCL	5	5	6	--	200	--	0.5	0.5	--	--	0.02
SFS GW	ND - 1.4	ND - 2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND

* = Results reported in this table are for those parameters detected above analytical method EPA 8010-L detection limits in at least one well. The parameters analyzed for by method 8010-L and typical detection limits are listed in Appendix A.

** = Samples analyzed for Appendix IX parameters, using method EPA 8240-L & AB 1803.

ND = Analytical parameter not detected.

MW = Monitor Well

MCL = Maximum Contaminant Limit

SFS GW = Range of concentrations in wells tested in Santa Fe Springs during the year 1989.

TABLE 4-12
SOUTHERN CALIFORNIA CHEMICAL
January 1991 Quarterly Monitoring Well Sampling
Halogenated Organic Analytical Results
(µg/L)

Well Identification	Tetra-chloro-ethene (PCE)	Tri-chloro-ethene (TCE)	1,1-Di-chloro-ethene (1,1-DCE)	1,1-Di-chloro-ethane (1,1-DCA)	1,2-Di-chloro-ethane (1,2-DCA)	1,1,2,2-Tri-chloro-ethane (1,2-TCA)	Carbon tetra-chloride (CCL4)	Chloroform (CHCL3)	Methylene chloride (CH2CL2)
SCC-MW01S	6.8	26.0	ND	ND	1.0	ND	ND	ND	ND
SCC-MW01D	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW02	ND	15.0	ND	ND	ND	ND	ND	ND	ND
SCC-MW03	ND	38.0	ND	ND	26.0	ND	74.0	ND	ND
SCC-MW04	ND	180.0	ND	57.0	190.0	ND	ND	ND	ND
SCC-MW04A	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW05	ND	22.0	ND	ND	ND	ND	140.0	49.0	ND
SCC-MW06B	13.0	59.0	ND	ND	ND	ND	ND	ND	ND
SCC-MW06D	20.0	78.0	ND	ND	ND	ND	ND	ND	ND
SCC-MW07	ND	1.8	3.0	20.0	ND	ND	ND	ND	ND
SCC-MW08	ND	26.0	6.0	59.0	30.0	ND	ND	ND	ND
SCC-MW09	ND	26.0	7.0	14.0	30.0	ND	ND	ND	ND
SCC-MW1O	ND	ND	ND	ND	220.0	ND	ND	ND	ND
SCC-MW11	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW12S	ND	10	ND	ND	27.0	ND	ND	ND	ND
SCC-MW12D	ND	ND	ND	ND	ND	ND	ND	ND	ND
SCC-MW13S	ND	7.8	ND	1.6	ND	3.0	ND	ND	ND
SCC-MW13D	ND	1.5	ND	ND	ND	ND	ND	ND	ND
SCC-MW14S	ND	108.0	15.0	13.0	38.0	ND	ND	ND	13.0
SCC-MW14D	ND	1.6	ND	ND	ND	ND	ND	ND	ND
SCC-MW15S	ND	13.0	1.0	ND	9.6	ND	ND	ND	ND
SCC-MW15D	ND	ND	ND	ND	ND	ND	ND	ND	ND
MCL	5.0	5.0	6.0	--	0.5	1.0	0.5	--	--
SFS GW	ND - 1.4	ND - 2.8	ND	ND	ND	ND	ND	ND	ND

ND = Analytical parameter not detected.
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe
Springs during the year 1989.

TABLE 4-13
SOUTHERN CALIFORNIA CHEMICAL
October 1990 Quarterly Monitoring Well Sampling
Purgeable Aromatic Analytical Results *
(μg/L)

Well Identification	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)
SCC-MW01	ND	ND	ND	ND
SCC-MW01D	ND	ND	ND	ND
SCC-MW02	ND	ND	ND	ND
SCC-MW03	9.0	ND	2.0	ND
SCC-MW04 **	ND	230	17	650
SCC-MW04A **	ND	ND	ND	ND
SCC-MW05	ND	ND	ND	ND
SCC-MW06D **	ND	ND	ND	ND
SCC-MW06B **	ND	ND	ND	ND
SCC-MW07	ND	ND	ND	ND
SCC-MW08	ND	ND	ND	ND
SCC-MW09	ND	ND	ND	ND
SCC-MW10	ND	1330	330	980
SCC-MW11	ND	3000	15000	10000
SCC-MW12S **	ND	11	ND	ND
SCC-MW12D **	ND	ND	ND	ND
SCC-MW13S	ND	ND	ND	ND
SCC-MW13D	ND	ND	ND	ND
SCC-MW14S	ND	1750	ND	ND
SCC-MW14D	ND	ND	ND	ND
SCC-MW15S **	ND	ND	ND	ND
SCC-MW15D **	ND	ND	ND	ND
MCL	0.1	680	--	1750
SFS GW	ND	ND	ND	ND

* = Results reported in this table are for those parameters detected above analytical method EPA 8020-L detection limits in at least one well. The parameters analyzed for by method 8020-L and typical detection limits are listed in Appendix A.

** = Samples analyzed for Appendix IX parameters, using method EPA 8240-L.

ND = Analytical parameter not detected.
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in wells tested in Santa Fe Springs during the year 1989.

TABLE 4-14
SOUTHERN CALIFORNIA CHEMICAL
January 1991 Quarterly Monitoring Well Sampling
Purgeable Aromatic Analytical Results
(µg/L)

Well Identification	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)
SCC-MW01	ND	ND	ND	ND
SCC-MW01D	ND	ND	ND	ND
SCC-MW02	ND	ND	ND	ND
SCC-MW03	ND	ND	ND	ND
SCC-MW04	ND	ND	ND	1.0
SCC-MW04A	ND	ND	ND	ND
SCC-MW05	ND	ND	ND	ND
SCC-MW06B	ND	ND	ND	ND
SCC-MW06D	ND	ND	ND	ND
SCC-MW07	ND	ND	ND	ND
SCC-MW08	ND	1.7	3.0	4.4
SCC-MW09	ND	1.4	6.6	9.0
SCC-MW10	ND	ND	ND	4.0
SCC-MW11	ND	4.0	15.0	12.0
SCC-MW12S	ND	4.5	ND	ND
SCC-MW12D	ND	ND	ND	ND
SCC-MW13S	ND	ND	ND	ND
SCC-MW13D	ND	ND	ND	ND
SCC-MW14S	ND	2.0	ND	590
SCC-MW14D	ND	ND	ND	4.0
SCC-MW15S	ND	1.6	4.0	4.0
SCC-MW15D	ND	ND	1.3	ND
MCL	0.1	680	--	1750
SFS GW	ND	ND	ND	ND

ND = Analytical parameter not detected.
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe Springs during the year 1989.

TABLE 4-15
SOUTHERN CALIFORNIA CHEMICAL
October 1990 Quarterly Monitoring Well Sampling
Inorganic Analytical Results *
(mg/L)

Well Identification	Barium	Cadmium	Chromium (hexavalent	Chromium (total)	Copper	Iron	Nickel	Zinc	Chloride	Nitrates (Nitrogen)	Cyanide (total)
	EPA-6010-L	EPA-6010-L	EPA-7196	EPA-6010-L	EPA-6010-L	EPA-6010-L	EPA-6010-L	EPA-6010-L	EPA-300	EPA-300	EPA-9012
SCC-MW01	NA	ND	ND	ND	0.023	ND	ND	0.023	650	0.33	NA
SCC-MW01D	NA	ND	ND	0.012	ND	2.3	ND	0.044	104	6.3	NA
SCC-MW02	NA	ND	ND	ND	ND	ND	ND	0.055	199	7.3	NA
SCC-MW03	NA	ND	ND	ND	ND	5.3	ND	ND	636	4.1	NA
SCC-MW04**	0.049	0.23	58.9	48.4	0.022	ND	ND	0.051	871	0.29	ND
SCC-MW04A**	0.033	ND	ND	0.038	ND	ND	ND	0.70	142	5.6	ND
SCC-MW05	NA	ND	ND	ND	ND	ND	ND	0.20	182	8.7	NA
SCC-MW06D**	0.031	ND	ND	ND	0.02	ND	ND	0.078	145	9.8	ND
SCC-MW06B**	0.033	ND	ND	0.012	ND	ND	ND	0.058	98.4	10	ND
SCC-MW07	NA	ND	ND	ND	ND	0.18	ND	0.19	629	4.3	NA
SCC-MW08	NA	ND	ND	ND	ND	ND	ND	0.028	346	4.9	NA
SCC-MW09	NA	ND	0.25	0.19	0.062	ND	ND	0.12	280	3.5	NA
SCC-MW10	NA	ND	ND	ND	ND	0.79	ND	0.080	369	0.21	NA
SCC-MW11	NA	ND	ND	ND	ND	0.18	ND	0.17	161	3.1	NA
SCC-MW12S**	0.071	ND	ND	ND	ND	ND	ND	ND	201	6.1	ND
SCC-MW12D**	0.049	ND	ND	ND	ND	ND	ND	0.028	196	5.5	ND
SCC-MW13S	NA	ND	ND	ND	ND	ND	ND	0.040	217	0.26	NA
SCC-MW13D	NA	ND	ND	ND	ND	ND	ND	0.091	180	6.0	NA
SCC-MW14S	NA	0.018	3.2	2.2	5.3	ND	0.82	1.4	950	5.1	NA
SCC-MW14D	NA	ND	ND	ND	ND	ND	ND	0.056	273	7.3	NA
SCC-MW15S**	0.062	ND	ND	ND	ND	ND	ND	0.049	209	ND	0.017
SCC-MW15D**	0.036	ND	ND	ND	ND	ND	ND	0.041	97.2	7.8	ND
MCL	1.0	0.01	--	0.05	1	0.3	0.1***	5	250	10	0.2***
SFS GW	< 0.1	< 0.001	--	< 0.01	<0.02-0.05	<0.06-0.18	--	<0.02-0.06	<1.3-83.2	0.5-9.9	--

* = Results reported in this table are for those parameters detected above analytical method detection limits in at least one well. The parameters analyzed for by each method and typical detection limits are listed in Appendix A.

** = Samples analyzed for Appendix IX parameters.

*** = Proposed MCL value

ND = Analytical parameter not detected.
NA = Parameter not analyzed
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in wells tested in Santa Fe Springs in the year 1989.

TABLE 4-16
SOUTHERN CALIFORNIA CHEMICAL
January 1991 Quarterly Monitoring Well Sampling
Inorganic Analytical Results
(mg/L)

Well Identification	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Zinc EPA-6010-L	Chloride EPA-300	Nitrates (Nitrogen) EPA-300
SCC-MW01	ND	ND	ND	ND	ND	ND	0.051	606	5.7
SCC-MW01D	ND	ND	0.025	ND	ND	ND	ND	85.6	5.1
SCC-MW02	ND	ND	0.01	ND	0.67	ND	ND	138	5.7
SCC-MW03	ND	ND	ND	ND	0.18	ND	ND	104	ND
SCC-MW04	0.26	49.4	65.3	ND	ND	ND	0.098	812	ND
SCC-MW04A	ND	ND	ND	ND	ND	ND	ND	127	6.2
SCC-MW05	ND	ND	ND	ND	0.35	ND	2.7	74.8	7.4
SCC-MW06B	ND	ND	ND	ND	0.19	ND	0.024	67.3	9.3
SCC-MW06D	ND	ND	ND	ND	0.13	ND	0.022	75.8	8.9
SCC-MW07	ND	ND	ND	ND	0.22	ND	0.094	629	4.3
SCC-MW08	ND	ND	ND	ND	ND	ND	0.78	212	3.4
SCC-MW09	ND	0.124	0.085	ND	0.17	ND	0.46	174	5.5
SCC-MW10	ND	ND	ND	ND	0.87	ND	0.15	183	ND
SCC-MW11	ND	ND	ND	ND	0.16	ND	0.069	115	0.89
SCC-MW12S	ND	ND	ND	ND	ND	ND	ND	118	5.5
SCC-MW12D	ND	ND	ND	ND	ND	ND	ND	134	5.2
SCC-MW13S	ND	ND	0.014	ND	ND	ND	ND	142	5.0
SCC-MW13D	ND	ND	ND	ND	ND	ND	0.61	140	5.0
SCC-MW14S	0.007	0.4	0.94	1.0	ND	0.26	0.38	698	2.1
SCC-MW14D	ND	ND	ND	ND	0.34	ND	0.022	128	6.7
SCC-MW15S	ND	ND	ND	ND	ND	ND	0.046	133	ND
SCC-MW15D	ND	ND	ND	ND	ND	ND	1.8	94.4	7.7
MCL	0.01	--	0.05	1.0	0.3	0.1*	5.0	250	10
SFS GW	< 0.001	--	< 0.01	<0.02-0.05	<0.06-0.18	--	<0.02-0.06	24.3-83.2	0.5-9.9

ND = Analytical parameter not detected.
NA = Parameter not analyzed
MW = Monitor Well
* Proposed MCL value

MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe Springs in the year 1989.

TABLE 4-17
SOUTHERN CALIFORNIA CHEMICAL
January 1991 Quarterly Monitoring Well Sampling
RCRA Indicator Results (Quadruplicate Analyses)

Well Identification	EC (umhos/cm)	pH (lab units)	TOC (mg/l)	TOX (ug/l)
SCC-MW01S	2,440	7.0	11.1	0.088
SCC-MW01S (DUPLICATE)	2,510	6.9	12.1	0.086
SCC-MW01S (TRIPLICATE)	2,470	7.0	13.3	0.076
SCC-MW01S (QUADRUPLICATE)	2,350	7.1	12.9	0.073
SCC-MW01D	1,280	7.6	2.3	0.063
SCC-MW01D (DUPLICATE)	1,320	7.5	1.5	0.063
SCC-MW01D (TRIPLICATE)	1,290	7.5	1.9	0.060
SCC-MW01D (QUADRUPLICATE)	1,300	7.5	2.4	0.061
SCC-MW02	1,620	7.4	2.6	0.040
SCC-MW02 (DUPLICATE)	1,560	7.4	1.7	0.052
SCC-MW02 (TRIPLICATE)	1,640	7.4	1.3	0.035
SCC-MW02 (QUADRUPLICATE)	1,600	7.4	1.9	0.043
SCC-MW03	1,460	7.3	14.4	0.14
SCC-MW03 (DUPLICATE)	1,440	7.3	13.6	0.14
SCC-MW03 (TRIPLICATE)	1,410	7.3	12.2	0.14
SCC-MW03 (QUADRUPLICATE)	1,410	7.2	12.0	0.15
SCC-MW04	4,250	6.8	182	1.2
SCC-MW04 (DUPLICATE)	4,250	6.8	173	1.2
SCC-MW04 (TRIPLICATE)	4,210	6.8	174	1.3
SCC-MW04 (QUADRUPLICATE)	4,140	6.8	171	1.3
SCC-MW04A	1,590	7.5	2.1	0.026
SCC-MW04A (DUPLICATE)	1,590	7.5	2.1	0.027
SCC-MW04A (TRIPLICATE)	1,600	7.5	2.3	0.027
SCC-MW04A (QUADRUPLICATE)	1,570	7.5	2.3	0.026
SCC-MW05	1,300	7.2	3.5	0.16
SCC-MW05 (DUPLICATE)	1,300	7.2	3.6	0.18
SCC-MW05 (TRIPLICATE)	1,280	7.2	3.9	0.18
SCC-MW05 (QUADRUPLICATE)	1,300	7.2	3.8	0.20
SCC-MW06B	1,340	7.3	1.9	0.068
SCC-MW06B (DUPLICATE)	1,340	7.3	2.2	0.067
SCC-MW06B (TRIPLICATE)	1,340	7.3	2.6	0.052
SCC-MW06B (QUADRUPLICATE)	1,340	7.3	2.9	0.081
SCC-MW06D	1,410	7.4	3.2	0.14
SCC-MW06D (DUPLICATE)	1,410	7.4	3.4	0.095
SCC-MW06D (TRIPLICATE)	1,390	7.4	2.4	0.10
SCC-MW06D (QUADRUPLICATE)	1,400	7.4	2.0	0.092
SCC-MW07	2,990	7.4	4.5	0.097
SCC-MW07 (DUPLICATE)	2,930	7.4	4.6	0.078

ND = Analytical parameter not detected.
NA = Parameter not analyzed
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe Springs in the year 1989.
EC = Electrical Conductivity
TOC = Total Organic Carbon
TOX = Total Organic Halides

TABLE 4-17
SOUTHERN CALIFORNIA CHEMICAL
January 1991 Quarterly Monitoring Well Sampling
RCRA Indicator Results (Quadruplicate Analyses)

Well Identification	EC (umhos/cm)	pH (lab units)	TOC (mg/l)	TOX (ug/l)
SCC-MW07 (TRIPLICATE)	2,950	7.4	3.9	0.073
SCC-MW07 (QUADRUPLICATE)	2,920	7.4	4.5	0.10
SCC-MW08	1,990	7.2	14.9	0.20
SCC-MW08 (DUPLICATE)	1,970	7.2	13.7	0.20
SCC-MW08 (TRIPLICATE)	1,950	7.2	14.4	0.20
SCC-MW08 (QUADRUPLICATE)	2,100	7.1	15.1	0.20
SCC-MW09	1,730	7.2	26.8	0.20
SCC-MW09 (DUPLICATE)	1,760	7.1	27.0	0.20
SCC-MW09 (TRIPLICATE)	1,720	7.1	24.2	0.20
SCC-MW09 (QUADRUPLICATE)	1,720	7.2	27.4	0.19
SCC-MW10	1,890	7.3	196	0.40
SCC-MW10 (DUPLICATE)	1,910	7.3	190	0.42
SCC-MW10 (TRIPLICATE)	1,920	7.3	190	0.42
SCC-MW10 (QUADRUPLICATE)	1,900	7.3	188	0.40
SCC-MW11	1,530	7.5	68.4	0.13
SCC-MW11 (DUPLICATE)	1,500	7.5	66.5	0.13
SCC-MW11 (TRIPLICATE)	1,530	7.5	64.3	0.14
SCC-MW11 (QUADRUPLICATE)	1,520	7.5	63.2	0.14
SCC-MW12S	1,600	7.4	11.3	0.063
SCC-MW12S (DUPLICATE)	1,630	7.4	11.8	0.062
SCC-MW12S (TRIPLICATE)	1,610	7.4	11.4	0.067
SCC-MW12S (QUADRUPLICATE)	1,570	7.4	10.8	0.13
SCC-MW12D	1,690	7.5	2.2	0.024
SCC-MW12D (DUPLICATE)	1,720	7.4	2.3	0.022
SCC-MW12D (TRIPLICATE)	1,680	7.4	2.2	0.023
SCC-MW12D (QUADRUPLICATE)	1,720	7.5	2.4	0.022
SCC-MW13S	1,640	7.4	2.1	0.083
SCC-MW13S (DUPLICATE)	1,650	7.4	3.7	0.095
SCC-MW13S (TRIPLICATE)	1,640	7.4	3.6	0.073
SCC-MW13S (QUADRUPLICATE)	1,600	7.4	3.6	0.075
SCC-MW13D	1,690	7.6	2.1	0.031
SCC-MW13D (DUPLICATE)	1,680	7.5	2.2	0.026
SCC-MW13D (TRIPLICATE)	1,620	7.5	2.3	0.023
SCC-MW13D (QUADRUPLICATE)	1,670	7.5	2.2	0.026
SCC-MW14S	2,960	7.0	87.2	0.41
SCC-MW14S (DUPLICATE)	2,930	7.0	80.6	0.49
SCC-MW14S (TRIPLICATE)	2,940	7.0	80.0	0.22
SCC-MW14S (QUADRUPLICATE)	2,950	7.0	83.4	0.49

ND = Analytical parameter not detected.
NA = Parameter not analyzed
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe Springs in the year 1989.
EC = Electrical Conductivity
TOC = Total Organic Carbon
TOX = Total Organic Halides

TABLE 4-17
SOUTHERN CALIFORNIA CHEMICAL
January 1991 Quarterly Monitoring Well Sampling
RCRA Indicator Results (Quadruplicate Analyses)

Well Identification	EC (umhos/cm)	pH (lab units)	TOC (mg/l)	TOX (ug/l)
SCC-MW14D	1,640	7.4	2.6	0.028
SCC-MW14D (DUPLICATE)	1,640	7.4	2.5	0.026
SCC-MW14D (TRIPLICATE)	1,670	7.4	2.6	0.026
SCC-MW14D (QUADRUPLICATE)	1,670	7.4	2.5	0.020
SCC-MW15S	1,390	7.1	26.1	0.082
SCC-MW15S (DUPLICATE)	1,420	7.1	24.6	0.069
SCC-MW15S (TRIPLICATE)	1,380	7.1	24.6	0.059
SCC-MW15S (QUADRUPLICATE)	1,420	7.1	24.6	0.071
SCC-MW15D	1,490	7.5	1.7	0.028
SCC-MW15D (DUPLICATE)	1,510	7.5	1.7	0.029
SCC-MW15D (TRIPLICATE)	1,520	7.5	2.1	0.022
SCC-MW15D (QUADRUPLICATE)	1,510	7.5	2.6	0.022
MCL	--	--	--	--
SFS GW	640-1150	7.82-7.95	--	--

ND = Analytical parameter not detected.
NA = Parameter not analyzed
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe Springs in the year 1989.
EC = Electrical Conductivity
TOC = Total Organic Carbon
TOX = Total Organic Halides

TABLE 4-18
SOUTHERN CALIFORNIA CHEMICAL
AQUIFER TEST PARAMETERS
Analyzed by GWAP

Well No.	Distance From Pumping Well (ft.)	Well Screen Interval (ft. bgs)	Transmissivity (gpd/ft.)		Hydraulic Conductivity (gpd/sq.ft.)		Storativity	
			Drawdown	Recovery	Drawdown	Recovery	Drawdown	Recovery
MW-3	88	45-75	79,080	92,910	1,977	2,323	1.14E-02	3.54E-03
MW-4	10	45-75	18,150	13,430	404	336	1.54E-02	1.58E-02
MW-4A	7	87-107	41,500	37,850	1,038	0,946	7.90E-02	5.72E-02
MW-8	81	41-71	64,280	67,300	1,607	1,683	9.79E-03	7.60E-03
MW-9	91	47-77	68,870	64,280	1,722	1,607	7.41E-03	1.02E-02
MW-10	88	45-75	59,990	67,300	1,500	1,683	1.03E-02	7.81E-03
MW-14S	88	51-71	77,280	73,800	1,932	1,845	1.23E-02	1.20E-02
MW-14D	92	88-103	99,550	106,700	2,489	2,668	6.17E-03	3.47E-03

Notes: constant discharge rate was 50 gpm
aquifer thickness was assumed to be 40 ft.

TABLE 4-19
SOUTHERN CALIFORNIA CHEMICAL
AQUIFER TEST PARAMETERS
Analyzed by AQTESOLV (with partial penetration)

Well No.	Distance From Pumping Well (ft.)	Well Screen Interval (ft. bgs)	Transmissivity (gpd/ft.)		Hydraulic Conductivity (gpd/sq.ft.)		Storativity	
			Drawdown	Recovery	Drawdown	Recovery	Drawdown	Recovery
MW-3	88	45-75	82,944	105,182	2,074	2,630	1.13E-02	2.41E-03
MW-4	10	45-75	16,498	17,983	412	450	9.98E-03	8.07E-03
MW-4A	7	87-107	45,268	47,165	1,132	1,179	1.14E-01	7.95E-02
MW-8	81	41-71	71,161	81,082	1,779	2,027	8.09E-03	5.51E-03
MW-9	91	47-77	66,402	77,341	1,660	1,934	7.89E-03	7.84E-03
MW-10	68	45-75	63,390	71,774	1,585	1,794	1.02E-02	6.50E-03
MW-14S	86	51-71	81,419	86,934	2,035	2,173	1.01E-02	8.64E-03
MW-14D	92	88-103	92,106	101,109	2,303	2,528	6.96E-03	4.04E-03

Notes: constant discharge rate was 50 gpm
aquifer thickness was assumed to be 40 ft.

TABLE 4-20
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Investigation Aquifer Test Sampling
Groundwater Analytical Results
(mg/L)

SAMPLE IDENTIFICATION	ARSENIC EPA-7060	CYANIDE (TOTAL) EPA-9010	CADMIUM EPA-6010	CHROMIUM (HEXVALENT) EPA-7196	CHROMIUM (TOTAL) EPA-6010	COPPER EPA-6010	IRON EPA-6010	NICKEL EPA-6010	AMMONIA (NITROGEN) EPA-350.3	NITRATE (NITROGEN) EPA-300 0	SULFIDE AS SULFER EPA-376 2	CHLORIDE EPA-325 2
SCC-PT1-WELL	0 008	ND	0.12	13 4	10 4	ND	ND	ND	63.8	1 9	0 36	461
SCC-PT2-FILTER	0 007	0 035	ND	3.1	3	0 031	ND	0.043	36 5	0 23	ND	572
SCC-PT3-FILTER-C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SCC-PT4-WELL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SCC-PT5-WELL	0.006	ND	0.058	7.2	7.9	ND	ND	ND	63 8	3.8	0 34	342
SCC-PT6-FILTER-C	ND	ND	0 041	6.4	6.5	ND	ND	ND	50.2	3 9	0.19	368
SCC-PT7-RW-POND	ND	ND	0 0061	6 4	5.7	0.37	0.1	0.1	140	0 2	0 18	620
TRAVEL BLANK	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SAMPLE IDENTIFICATION	METHYLENE CHLORIDE EPA-601	1,1-DICHLO-ETHANE EPA-601	1,1-DICHLO-ETHENE EPA-601	1,2-DICHLO-ETHANE EPA-601	TRI-CHLORO-ETHENE EPA-601	ETHYL-BENZENE EPA-602	TOLUENE EPA-602	XYLENES (TOTAL) EPA-602	BASE NEUTRAL ACID EPA-625	OIL & GREASE EPA-413 1	TOTAL SUSPENDED SOLIDS EPA-160.2	
SCC-PT1-WELL	0.069	ND	ND	0.06	0.022	0.34	0.037	0.14	NA	7.8	15	
SCC-PT2-FILTER	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.5	11	
SCC-PT3-FILTER-C2	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	
SCC-PT4-WELL	0.0054	0 0063	ND	0.032	0.014	ND	ND	ND	NA	NA	NA	
SCC-PT5-WELL	0.0051	0.013	0.009	0.038	0.055	0.59	0.029	0.32	NA	5 6	14	
SCC-PT6-FILTER-C	0.001	ND	ND	ND	ND	ND	ND	ND	NA	6.0	ND	
SCC-PT7-RW-POND	0.0014	ND	ND	ND	ND	0.011	ND	0.0051	ND	10.9	22	
TRAVEL BLANK	0.0017	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	

NOTE: PT1 & PT2 were collected at the beginning of the test. PT3 & PT4 were collected at the middle of the test from one canister. PT5 & PT6 were collected at the end of the test from one canister. PT7 was collected from the pond at the end of the test.

FILE NAME: PUMPTST1.WK1

Phase II RFI

TABLE 4-2
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Investigation Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150.1
DRYING POND AREA										
WMU46-SB1	10	0.38	ND	44	890	26,000	[illegible]	11	100	5.4
	15	0.23	ND	11	58	6400	[illegible]	2.2	26	6.0
	20	ND	ND	41	300	13,000	[illegible]	3.7	59	3.8
	25	0.17	ND	35	190	23,000	[illegible]	8.1	150	3.5
WMU46-SB2	3	ND	ND	39	500	36,000	[illegible]	18	1,100	7.1
	6	6.1	ND	42	230	27,000	[illegible]	13	170	7.5
	10	ND	ND	48	56	36,000	34	20	99	8.3
	15	ND	ND	6.3	8.6	5,600	5.3	2.5	15	8.1
	20	ND	ND	10	10	8,000	7.2	4.2	20	7.1
	25	ND	ND	9.8	11	8,300	7.1	3.9	20	6.5
	30	ND	ND	17	15	11,000	9.8	5.4	26	6.8
	35	ND	ND	48	42	31,000	31	14	98	7.5
	40	ND	ND	37	45	35,000	30	15	91	8.0
WMU46-SB3	10	0.49	ND	55	2400	37,000	1400	14	240	6.8
	14	0.32	ND	10	[illegible]	7200	96	2.3	56	4.2
WMU46-HB1	1-2	ND	ND	37	39	22,000	31	13	57	7.1
	5-6	0.43	ND	55	1000	36,000	520	17	220	4.8
	9-10	ND	ND	72	[illegible]	4600	150	21	120	5.7
WMU46-HB2	1-2	0.26	ND	44	130	23,000	[illegible]	11	80	7.0
	5-6	0.32	ND	61	64	35,000	[illegible]	18	78	7.0
	9-10	ND	ND	17	18	10,000	150	5.6	29	6.6

Shaded box indicates that value is greater than one order of magnitude above background concentration

ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-2
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Investigation Soil Sampling
Metals and pH Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Iron EPA-6010-L	Nickel EPA-6010-L	Lead EPA-6010-L	Zinc EPA-6010-L	pH EPA-150 1
WASTE ACID TANK AREA										
WMU12-SB1	3	0.47	ND	88	25	22,000	18	13	140	[illegible]
	5	0.28	ND	40	25	23,000	21	9.9	66	7.2
	10	0.54	ND	71	72	40,000	50	20	100	6 9
	15	ND	ND	32	27	19,000	17	8 9	57	7.3
	20	[illegible]	ND	11	7.1	7900	7.6	2.5	23	7 5
	30	[illegible]	ND	34	31	24,000	23	9.4	66	6 9
	40	ND	ND	51	62	34,000	35	23	92	6 9
WMU12-SB2	3	[illegible]	ND	450	37	1600	17	68	190	8.9
	5	0.14	ND	94	22	22,000	20	9.4	56	7 9
	10	ND	ND	35	27	22,000	22	9.9	57	8 0
	15	ND	ND	30	21	20,000	16	8 2	50	7.5
	20	ND	ND	16	8.5	14,000	7.4	4.4	34	7.8
	30	ND	ND	11	3.6	9300	4.6	2.5	21	7.3
	40	ND	ND	41	35	25,000	29	9 7	76	6.5
PARKING AREA WEST OF LAB										
WPL-HB1	1-2	0.20	ND	45	31	27,000	24	14	62	8.2
	5-6	0.18	ND	45	33	26,000	25	13	57	8.8
	9-10	ND	ND	28	25	19,000	17	8 3	49	[illegible]
WPL-HB2	1-2	0.33	ND	62	46	29,000	27	25	78	[illegible]
	5-6	0.48	ND	55	53	26,000	25	26	72	[illegible]
	9-10	ND	ND	27	22	19,000	17	7.9	46	8.9

Shaded box indicates that value is greater than one order of magnitude above background concentration
ND = Parameter Not Detected NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Investigation Soil Sampling
Purgeable Halocarbons Analytical Results
* (mg/kg)

Boring	Depth (Feet)	Tri-chloro-ethene	Tetra-chloro-ethene	1,1-Di-chloro-ethene	1,1-Di-chloro-ethane	Trans 1,2-Di-chloro-ethene	1,1,1-Tri-chloro-ethane	Chloroform	Methylene chloride	1,2-Di-chloro-ethane	Cis 1,2-Di-chloro-ethene
		(TCE)	(PCE)	(1,1-DCE)	(1,1-DCA)	(T1,2-DCE)	(1,1,1-TCA)	(CHCL3)	(CH2CL2)	(1,2-DCA)	(C1,2-DCE)
UST AREA											
UST-SB14	10	ND	ND	ND	ND	ND	ND	ND	ND	0.1500	ND
	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
UST-SB15	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
UST-SB16	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DRYING POND AREA											
WMU46-SB2	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WMU46-SB3	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WASTE ACID TANK AREA											
WMU12-SB1	3	ND	ND	0.0070	0.0160	ND	0.0510	ND	ND	ND	ND
	5	ND	ND	0.0030	0.0190	ND	0.0180	ND	ND	ND	ND
	10	ND	ND	0.0064	0.0550	ND	0.0290	ND	ND	ND	0.0035
	15	ND	ND	0.0170	0.1600	ND	0.0910	0.0200	ND	ND	0.0090
	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	30	0.0370	ND	0.0065	0.0790	ND	0.0036	0.0029	0.0057	ND	0.0031
	40	0.2000	ND	0.0370	0.5600	0.0026	0.0036	0.0150	0.2100	0.0055	0.0110

*Analyses by EPA 8010, all others by EPA 8240
ND = Parameter Not Detected
NA = Parameter Not Analyzed

TABLE 4-3
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Investigation Soil Sampling
Purgeable Halocarbons Analytical Results
(mg/kg)

Boring	Depth (Feet)	Tri-chloro-ethene (TCE)	Tetra-chloro-ethene (PCE)	1,1-Di-chloro-ethene (1,1-DCE)	1,1-Di-chloro-ethane (1,1-DCA)	Trans 1,2-Di-chloro-ethene (T1,2-DCE)	1,1,1-Tri-chloro-ethane (1,1,1-TCA)	Chloroform (CHCL3)	Methylene chloride (CH2CL2)	1,2-Di-chloro-ethane (1,2-DCA)	Cis 1,2-Di-chloro-ethene (C1,2-DCE)
WASTE ACID TANK AREA											
WMU12-SB2	3	0.0550	ND	ND	0.0170	ND	ND	ND	ND	ND	ND
	5	0.0360	ND	ND	0.0250	ND	ND	ND	ND	ND	ND
	10	0.0330	ND	ND	0.0240	ND	0.0110	0.0034	ND	ND	ND
	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	40	0.0960	ND	0.0200	0.1010	0.0015	0.0170	0.0200	0.0670	0.0043	0.0058
WMU20 AREA											
WMU20-HB1	1-2	ND	10.0	ND	ND	ND	ND	ND	ND	ND	ND
	5-6	ND	0.2060	ND	ND	ND	ND	ND	ND	ND	ND
WMU20-HB2	1-2	ND	0.0064	ND	ND	ND	ND	ND	ND	ND	ND
	5-6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

*Analyses by EPA 8010, all others by EPA 8240
ND = Parameter Not Detected
NA = Parameter Not Analyzed

TABLE 4-4
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Investigation Soil Sampling
Purgeable Aromatic and UST Investigation Analytical Results
(mg/kg unless otherwise noted)

Soil Borings	Depth (Feet)	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	TPH (Extractable) EPA-8015M
UST AREA						
UST-SB12	10	ND	ND	ND	ND	ND
	15	ND	ND	ND	ND	ND
	20	ND	ND	ND	ND	ND
	25	ND	ND	ND	ND	ND
	30	ND	ND	ND	ND	ND
	35	ND	ND	ND	ND	ND
UST-SB13	10	ND	ND	ND	ND	ND
	15	ND	ND	ND	ND	ND
	20	ND	ND	ND	ND	ND
	25	ND	ND	ND	ND	ND
UST-SB14	10	ND	ND	ND	ND	9000*
	15	ND	ND	ND	ND	2900
	20	ND	ND	ND	ND	ND
	25	ND	ND	ND	ND	ND
	30	ND	ND	ND	ND	ND
UST-SB15	5	ND	0.28	ND	2.30	810
	10	ND	0.014	ND	0.011	980
	15	ND	1.10	ND	5.70	3600
	20	ND	0.56	ND	1.90	3500
	25	ND	0.25	ND	1.10	480
	30	ND	0.017	ND	0.040	ND
	35	ND	0.008	ND	0.050	ND
UST-SB16	5	ND	ND	ND	ND	ND
	10	ND	ND	ND	ND	ND
	15	0.006	0.15	0.013	0.84	770
	20	0.010	0.16	0.018	1.8	1600
	25	ND	0.008	ND	0.049	80
	30	ND	ND	ND	ND	ND
	35	ND	ND	ND	ND	ND
UST-SB17	5	ND	ND	ND	ND	29
	10	ND	ND	ND	ND	ND
	15	ND	0.66	1.8	7.0	4300
	20	ND	0.54	1.9	6.9	4400
	25	ND	0.069	ND	0.26	300
	30	ND	ND	ND	ND	ND
	35	ND	ND	ND	ND	ND
UST-SB18	5	0.010	0.13	0.055	2.3	1900
	10	ND	0.047	0.19	0.16	3000*
	15	ND	0.28	ND	0.52	850
	20	ND	0.61	0.017	1.1	2700
	25	ND	0.64	0.26	1.9	5100
	30	ND	ND	ND	ND	57
	35	ND	ND	ND	ND	41

*Carbon chain distribution: C8 to C44

Benzene, Ethylbenzene, Toluene, Xylenes (Total) analyses by EPA 8020.

ND = Parameter Not Detected

NA = Parameter Not Analyzed

TABLE 4-4
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Investigation Soil Sampling
Purgeable Aromatic and UST Investigation Analytical Results
(mg/kg unless otherwise noted)

Soil Borings	Depth (Feet)	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	TPH (Extractable) EPA-8015M
DRYING POND AREA						
WMU46-SB2	3	ND	0.005	ND	0.010	44
	6	ND	0.077	0.010	0.14	470
	10	ND	0.75	0.043	1.4	2800
	15	ND	1.6	0.017	2.9	2100
	20	0.005	2.0	0.23	4.2	3500
	25	ND	2.0	0.24	4.4	3200
	30	ND	2.5	0.11	6.6	7700
	35	ND	0.069	0.012	0.99	1400
	40	ND	0.034	ND	0.52	470
WMU46-SB3	10	ND	5.10	ND	14.0	3400
	14	ND	0.99	ND	3.0	1200

TABLE 4-5
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Investigation Soil Sampling
PCB's Analytical Results
(mg/kg)

Soil Boring	Depth (Feet)	Aroclor 1260 EPA-8080	Aroclor 1254 EPA-8080	Aroclor 1248 EPA-8080	Aroclor 1242 EPA-8080	Aroclor 1232 EPA-8080	Aroclor 1221 EPA-8080	Aroclor 1016 EPA-8080
PARKING AREA WEST OF LAB								
WPL-HB1	1-2	7.7	ND	ND	ND	ND	ND	ND
	5-6	1.4	ND	ND	ND	ND	ND	ND
	9-10	1.2	ND	ND	ND	ND	ND	ND
WPL-HB2	1-2	13.0	ND	ND	ND	ND	ND	ND
	5-6	3.6	ND	ND	ND	ND	ND	ND
	9-10	1.1	ND	ND	ND	ND	ND	ND

ND = Parameter Not Detected
NA = Parameter Not Analyzed

TABLE 4-6

SOUTHERN CALIFORNIA CHEMICAL

RCRA Facility Phase II Investigation Soil Sampling

MW 16 Soil Characteristics Analytical Results

Soil Boring	Depth (Feet)	Lithology	Field Moisture %	Field Dry Density lb/cu.ft	Gravel %	Sand %	Fines %	Specific Gravity	Porosity	Total Organic Carbon	Permeability (K) cm/sec
MW 16	10	CL	13.8	122.5	0.0	26	74	2.65	0.28	ND	6 x 10-8
	25	SW	7.0	110.6	0.0	88	12	NA	0.35	ND	6 x 10-6
	52	CL/SW	15.1	115.2	0.0	47	53	NA	0.34	ND	3 x 10-7
	65	SW	14.0	116.6	0.0	91	9	2.69	0.40	ND	1 x 10-3

NA = Parameter not analyzed

ND = Parameter not detected

CL = Silty Clay

SW = Sand

CL/SW = Silty Clay grading to Sand

TABLE 4-7
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Groundwater Sampling
Halogenated Organic Analytical Results
(µg/L)

Well Identification	Tetra-chloro-ethene (PCE)	Tri-chloro-ethene (TCE)	1,1-Di-chloro-ethene (1,1-DCE)	1,1-Di-chloro-ethane (1,1-DCA)	1,2-Di-chloro-ethane (1,2-DCA)	Carbon tetra-chloride (CCL4)	Chloroform (CHCL3)	Cis-1,2-Di-chloro-ethene (Cis-DCE)	Methylene Chloride (MC)	Isopropyl-benzene (IPB)	Trans-1,2-Di-chloro-ethene (Trans-DCE)	1,2-Di-chloro-benzene (o-DCB)	Ethylene Dibromide (EDB)
SCC-MW01S	1.8	9.9	ND	ND	ND	ND	ND	0 87	ND	ND	ND	ND	NA
SCC-MW01D	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW03	0 5	25	2.5	1.6	ND	120	43	ND	1.3	ND	ND	ND	NA
SCC-MW04	ND	280	57	120	49	ND	15	24	18	ND	ND	ND	ND
SCC-MW04A	0 7	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW06B	1.2	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW06D	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW07	ND	55	5.7	32	76	ND	0.97	4.4	ND	ND	ND	ND	NA
SCC-MW09	ND	52	ND	31	ND	ND	ND	ND	48	31	ND	ND	NA
SCC-MW11	0.76	70	4.7	8.1	0.8	ND	1.3	0.77	ND	1.2	ND	0 58	NA
SCC-MW14S	0.8	56	11	7	5.6	ND	1.6	0.86	1	ND	ND	ND	NA
SCC-MW15S	0.61	4 1	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	NA
SCC-MW15D	1.4	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
SCC-MW16	0 86	52	15	140	120	ND	0.88	13	ND	ND	2.4	ND	NA
MCL	5.0	5.0	6.0	--	0.5	0.5	--	6	--	--	10	--	0.02
SFS GW	ND - 1 4	ND - 2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All analyses performed by EPA Method 524.2, except EDB analysis, performed by EPA 8011
ND = Analytical parameter not detected
NA = Analytical parameter not analyzed
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe Springs during the year 1990.

TABLE 4-8
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Groundwater Sampling
Purgeable Aromatic & TPH Analytical Results
(ug/L)

Well Identification	Benzene	Ethyl-benzene	Toluene	Xylenes (Total)	TPH Mod. 8015
SCC-MW01S	ND	ND	ND	ND	NA
SCC-MW01D	ND	ND	ND	ND	NA
SCC-MW03	ND	1.6	0.76	3.0	NA
SCC-MW04	6.7	960	7.2	1,010	NA
SCC-MW04A	ND	ND	ND	ND	NA
SCC-MW06B	ND	1.1	ND	0.82	NA
SCC-MW06D	ND	ND	ND	ND	NA
SCC-MW07	ND	ND	ND	ND	NA
SCC-MW09	ND	3,600	2,800	6,190	NA
SCC-MW11	ND	130	1.7	2.3	NA
SCC-MW14S	ND	ND	ND	ND	NA
SCC-MW15S	ND	ND	ND	ND	NA
SCC-MW15D	ND	ND	ND	ND	NA
SCC-MW16	ND	1.0	0.69	1.6	ND
MCL	0.1	680	--	1,750	--
SFS GW	ND	ND	ND	ND	--

BTEX analyses performed by EPA Method 524.2.
ND = Analytical parameter not detected
NA = Analytical parameter not analyzed
TPH = Total Petroleum Hydrocarbons
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe Springs during the year 1990.

TABLE 4-9
SOUTHERN CALIFORNIA CHEMICAL
RCRA Facility Phase II Groundwater Sampling
Inorganic Analytical Results
(mg/L)

Well Identification	Cadmium EPA-6010-L	Chromium (Hexavalent) EPA-7196	Chromium (Total) EPA-6010-L	Copper EPA-6010-L	Lead EPA-6010-L	Nickel EPA-6010-L	Zinc EPA-6010-L	Iron EPA-6010-L	pH EPA-150 1	Ammonia as Nitrogen EPA-350.3	Total Organic Carbon EPA-415.1
SCC-MW01S	ND	ND	ND	ND	ND	ND	NA	NA	7.3	0.6	10 7
SCC-MW01D	ND	ND	ND	ND	NA	NA	NA	NA	7 9	NA	NA
SCC-MW03	ND	ND	ND	ND	NA	NA	NA	NA	7 8	NA	NA
SCC-MW04	0 84	32 2	29.2	0 053	ND	ND	NA	NA	6 8	0 18	68 8
SCC-MW04-UF	0 89	29 6	30.8	0.029	NA	NA	NA	NA	NA	NA	NA
SCC-MW04A	ND	ND	ND	ND	NA	NA	NA	NA	7.6	NA	NA
SCC-MW06B	ND	ND	0.014	ND	ND	ND	NA	NA	7 4	NA	NA
SCC-MW06D	ND	ND	ND	ND	ND	ND	NA	NA	7.3	NA	NA
SCC-MW07	ND	ND	0.013	0.032	NA	NA	NA	NA	7.2	NA	NA
SCC-MW09	ND	ND	ND	ND	NA	NA	NA	NA	7 2	0.22	45.6
SCC-MW11	ND	ND	ND	ND	NA	NA	NA	NA	7 5	NA	NA
SCC-MW14S	ND	0.13	0.16	0.041	ND	ND	NA	NA	7.3	0 21	14.7
SCC-MW14S-UF	ND	0.17	0.25	0.16	NA	NA	NA	NA	NA	NA	NA
SCC-MW15S	ND	ND	ND	ND	ND	ND	NA	NA	7.5	NA	NA
SCC-MW15D	ND	ND	ND	ND	NA	NA	NA	NA	7.6	NA	NA
SCC-MW16	ND	ND	ND	ND	ND	ND	ND	ND	7.2	NA	NA
MCL	0 01	--	0.05	1.0	0.05	--	5.0	0.3	--	--	--
SFS GW	< 0.001	--	< 0.01	<0.02-0.06	<0.002-<0.003	--	<0.2-0.073	<0.10	7.68-8.10	--	--

ND = Analytical parameter not detected.
NA = Parameter not analyzed
MW = Monitor Well
MCL = Maximum Contaminant Limit
SFS GW = Range of concentrations in water supply wells tested in Santa Fe Springs in the year 1990.
-- = Value not available
UF = Unfiltered sample.

Boring Location	Sample Depth (ft bgs)	Freon 12	Vinyl Chloride	Chloro-ethane	Freon 11	Dichloro-methane	trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,1,2-TCA
SV-1	5	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	2.9	ND<1	
	18	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	89	[illegible]	
SV-2	5	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1		
	18	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	88		
	26	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	89		
	26(K)	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1			
SV-3	5	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1			
	18	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1			
SV-4	5	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1			
	5(K)	ND<1	ND<1	ND<1	ND<1	ND<1	[illegible]			
	18	ND<1	ND<1	ND<1	ND<1	ND<1				
	18(K)	ND<1	ND<1	ND<1	ND<1	ND<1				
	18(K)(K)	ND<1	ND<1	ND<1	ND<1	ND				
SV-5	5	ND<1	ND<1	ND<1	ND<1					
	5(K)	ND<1	ND<1	ND<1	ND<1					
	17	ND<1	ND<1	ND<1	ND<1					
SV-6	5	ND<1	ND<1	ND<1	ND					
	17A	ND<1	ND<1	ND<1						
	17B	ND<1	ND<1	ND<1						
	17C	ND<1	ND<1	ND<1						
SV-7	5	ND<1	ND<1	ND						
	18	ND<1	ND<1							
SV-8	5	ND<1	ND<1							
	5(K)	ND<1	ND<1							
	18	ND<1	ND							
SV-9	5	ND<1								
	18	ND<1								
	18(K)	ND<1								
SV-10	5	N[illegible]								
	18									
SV-11	5									
	18									
SV-12										
SV-13										

Freon-113	Total Detected VOCs
ND<1	9.7
ND<1	294.6
ND<1	0.0
ND<1	351.2
ND<1	299.9
ND<1	275.3
ND<1	1.7
ND<1	260.1
ND<1	9.0
ND<1	5.1
2.3	561.4
ND<1	268.4
1.8	242.3
ND<1	0.0
ND<1	0.0
ND<1	36.3
ND<1	2.7
ND<1	21.7
1.9	36.6
ND<1	63.0
ND<1	4.6
ND<1	620.3
ND<1	70.0
ND<1	64.2
ND<1	469.2
ND<1	7.6
ND<1	417.0
ND<1	393.6
[illegible]	8.6
	221.7
	45.6
	183.7
	0.0
	[illegible]

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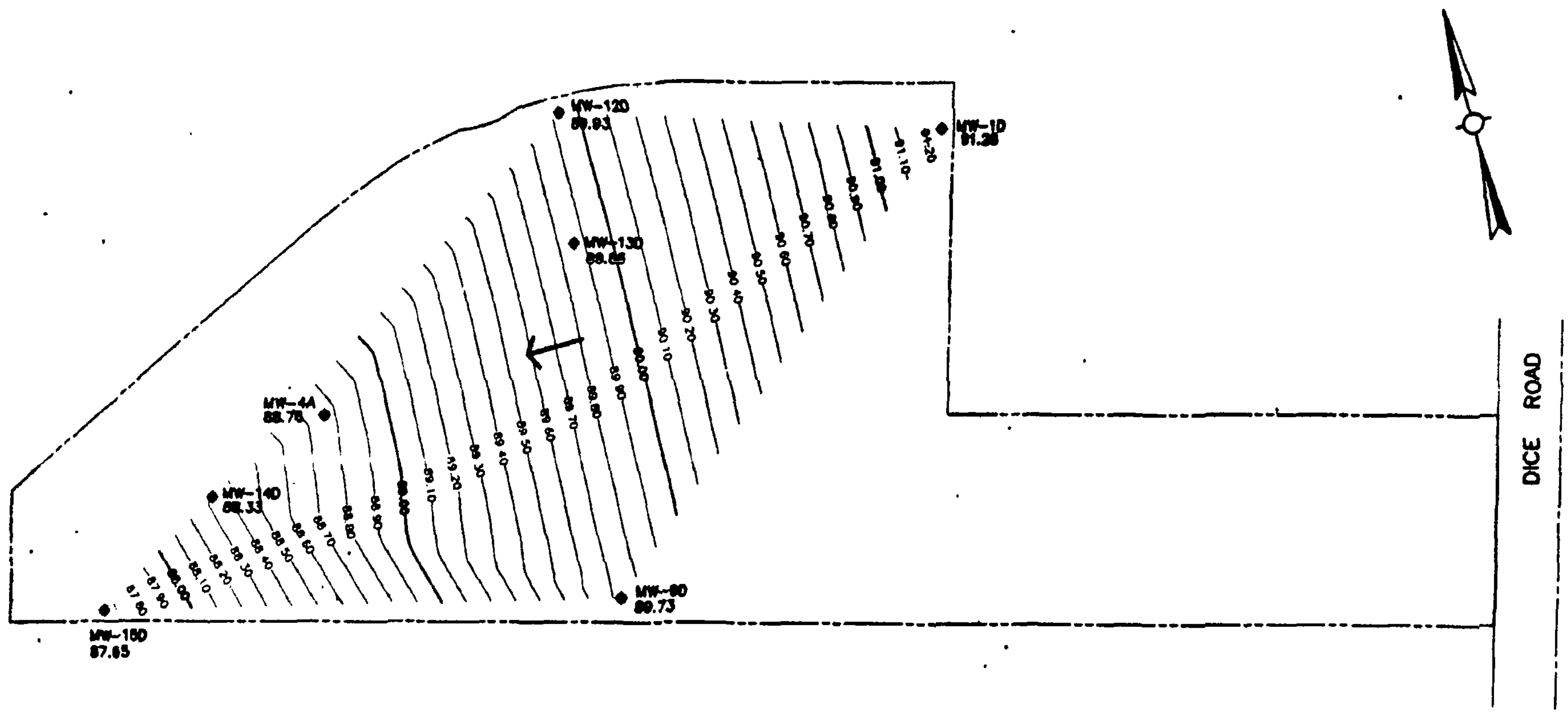


LEGEND

- PROPERTY LINE
- MONITORING WELL
- 91.28 GROUNDWATER ELEVATION (Feet Above MSL)
- 91.00 GROUNDWATER ELEVATION CONTOUR LINE (Feet Above MSL)
- GROUNDWATER FLOW DIRECTION

1" = 100'

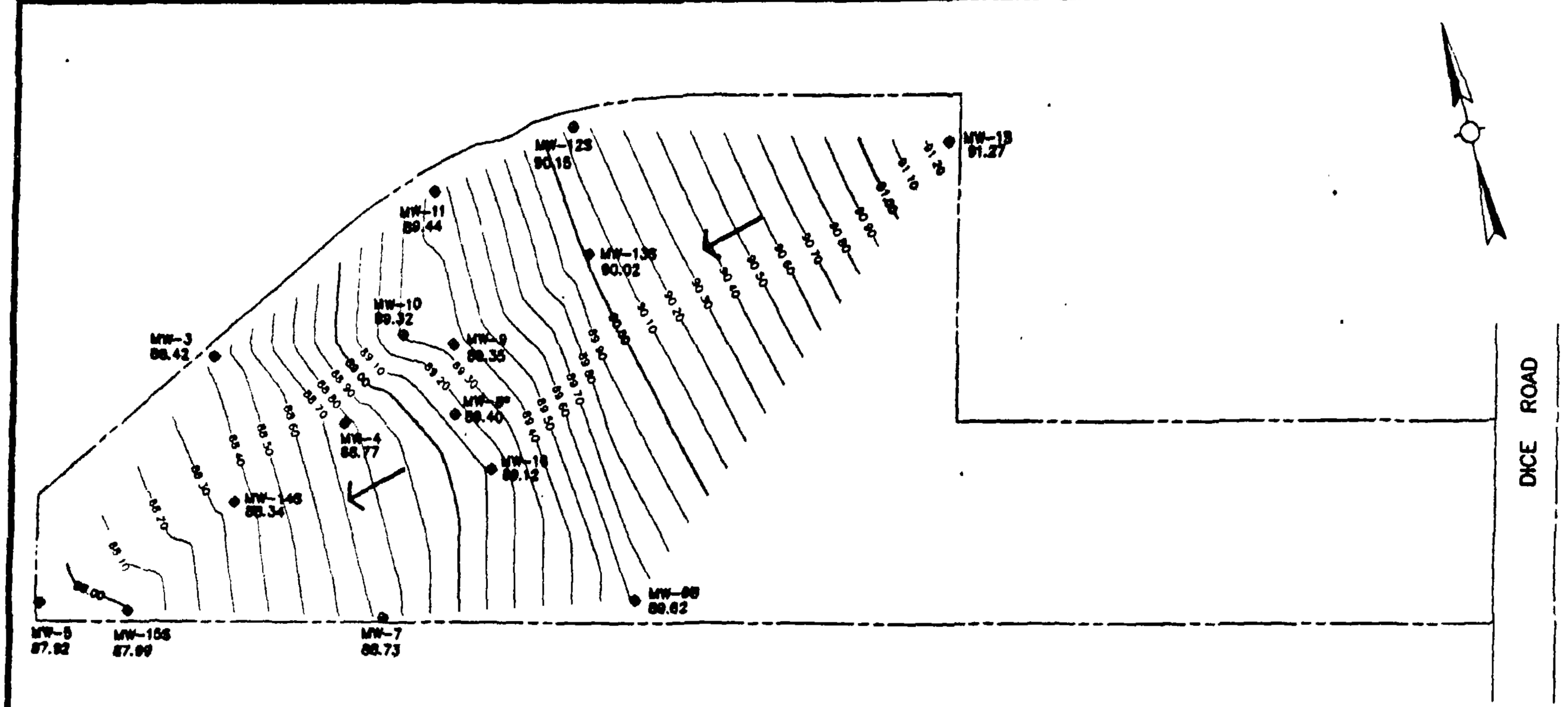
50 0 100

PHIBRO-TECH, INC., SANTA FE SPRINGS, CA

Groundwater Elevation Contours - Deep Wells
October 2004

CDM

Figure 5-2



LEGEND

———	PROPERTY LINE
◆	MONITORING WELL
91.27	GROUNDWATER ELEVATION (Feet Above MSL)
— 91.00 —	GROUNDWATER ELEVATION CONTOUR LINE (Feet Above MSL)
←	GROUNDWATER FLOW DIRECTION
*	NOT CONTOURED, ANOMALOUS INFORMATION

1" = 100'

50 0 100

PHIBRO-TECH, INC., SANTA FE SPRINGS, CA

Groundwater Elevation Contours - Shallow Wells
October 2004

CDM

Figure 5-1

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
MW-01D	79.5-94.5	94.8	152.60	01/13/98	0.0 / 0.0	39.31	96.0	--	113.29
		94.8	152.60	04/21/98	105.0 / 0.0	34.43	95.9	--	118.17
		94.8	152.60	07/14/98	0.0 / 0.0	33.40	95.9	--	119.20
		94.8	152.60	10/19/98	0.0 / 0.0	35.95	96.0	--	116.65
		94.8	152.60	01/19/99	7.1 / 0.4	38.60	96.0	--	114.00
		94.8	152.60	04/20/99	1.1 / 0.0	38.59	95.9	--	114.01
		94.8	152.60	07/20/99	1.2 / 0.0	38.93	95.9	--	113.67
		94.8	152.60	10/22/99	0.0 / 0.0	46.05	95.7	--	106.55
		94.8	152.60	01/25/00	2.0 / 0.0	49.84	94.8	0.0	102.76
		94.8	152.60	04/24/00	0.0 / 0.0	43.76	96.3	--	108.84
		94.8	152.60	10/17/00	0.0 / 0.0	43.61	95.7	--	108.99
		94.8	152.60	10/25/00	0.0 / 0.0	43.61	95.7	--	108.99
		94.8	152.60	04/17/01	0.0 / 0.0	41.28	94.8	0.0	111.32
		94.8	152.60	07/17/01	0.0 / 0.0	40.99	94.8	0.0	111.61
		94.8	152.60	10/16/01	0.0 / 0.0	45.21	96.0	--	107.39
		94.8	152.60	01/15/02	-- / --	43.69	95.7	--	108.91
		94.8	152.60	04/16/02	0.0 / 0.0	43.57	95.7	--	109.03
		94.8	152.60	07/24/02	0.3 / 0.0	47.76	96.0	--	104.84
		94.8	152.60	10/22/02	43.9 / 0.0	51.07	96.0	--	101.53
		94.8	152.60	01/24/03	0.1 / 0.1	49.09	96.0	--	103.51
		94.8	152.60	04/23/03	1.0 / 0.1	45.37	95.90	--	107.23
		94.8	152.60	07/29/03	0.0 / 0.0	48.50	96.00	--	104.10
		94.8	152.60	10/21/03	1.9 / 0.0	54.15	95.90	--	98.45
		94.8	152.60	01/21/04	0.0 / 0.0	55.61	95.92	--	96.99
		94.8	152.60	04/20/04	0.2 / 0.2	54.88	95.92	--	97.72
		94.8	152.60	07/20/04	0.4 / 0.4	57.65	95.68	--	94.95
		94.8	152.60	10/11/04	0.2 / 0.0	61.34	95.69	--	91.26
MW-01S	47-62.5	62.5	152.63	01/13/98	5.8 / 0.0	39.40	62.6	--	113.23
		62.5	152.63	04/21/98	109.0 / 0.0	34.47	62.6	0.0	118.16
		62.5	152.63	07/14/98	0.1 / 0.0	33.51	62.5	0.0	119.12
		62.5	152.63	10/19/98	0.0 / 0.0	36.06	62.7	--	116.57
		62.5	152.63	01/19/99	10.8 / 1.5	38.69	62.6	--	113.94
		62.5	152.63	04/20/99	1.1 / 0.0	38.62	62.5	0.0	114.01
		62.5	152.63	07/20/99	2.1 / 0.0	39.01	62.4	0.1	113.62
		62.5	152.63	10/22/99	0.0 / 0.0	45.93	62.1	0.4	106.70
		62.5	152.63	01/25/00	1.4 / 0.0	49.90	62.5	0.0	102.73
		62.5	152.63	04/24/00	12.0 / 0.0	43.80	62.5	0.0	108.83
		62.5	152.63	10/17/00	0.0 / 0.0	43.54	62.0	0.5	109.09
		62.5	152.63	10/25/00	0.0 / 0.0	43.54	62.0	0.5	109.09
		62.5	152.63	04/17/01	0.0 / 0.0	41.35	62.5	0.0	111.28
		62.5	152.63	07/17/01	0.0 / 0.0	41.05	61.4	1.2	111.58
		62.5	152.63	10/16/01	0.0 / 0.0	45.20	62.0	0.5	107.43
		62.5	152.63	01/15/02	-- / --	43.59	62.3	0.2	109.04
		62.5	152.63	04/16/02	0.0 / 0.0	43.62	62.1	0.4	109.01
		62.5	152.63	07/24/02	1.1 / 0.0	47.79	62.3	0.2	104.84
		62.5	152.63	10/22/02	53.6 / 0.0	51.08	62.3	0.2	101.55
		62.5	152.63	01/24/03	0.1 / 0.1	49.10	62.3	0.2	103.53
		62.5	152.63	04/23/03	0.1 / 0.1	45.29	62.22	0.3	107.34
		62.5	152.63	07/29/03	0.3 / 0.0	48.48	62.21	0.3	104.15
		62.5	152.63	10/21/03	1.0 / 0.0	54.03	62.24	0.3	98.60
		62.5	152.63	01/21/04	0.7 / 0.0	55.49	62.34	0.2	97.14
		62.5	152.63	04/20/04	NM / NM	54.93	62.19	0.3	97.70
		62.5	152.63	07/20/04	0.4 / 0.4	57.57	62.08	0.4	95.06
		62.5	152.63	10/11/04	0.0 / 0.0	61.36	62.2	0.3	91.27
MW-03	45-75	74.1	151.71	01/13/98	8.7 / 0.0	40.03	73.3	0.8	111.68
		74.1	151.71	04/21/98	3400.0 / 0.1	34.89	73.3	0.8	116.82
		74.1	154.75	07/14/98	13.0 / 0.0	36.73	73.5	0.6	118.02
		74.1	154.75	10/19/98	>2,000 / 0.0	39.35	73.6	0.5	115.40
		74.1	154.75	01/19/99	69.0 / 3.8	42.27	73.4	0.7	112.48
		74.1	154.75	04/20/99	8.1 / 0.0	42.26	73.3	0.8	112.49
		74.1	154.75	07/20/99	7.3 / 1.7	42.44	73.3	0.8	112.31
		74.1	154.75	10/22/99	3.3 / 0.0	50.33	73.3	0.8	104.42
		74.1	154.75	01/25/00	12.0 / 0.0	54.25	73.7	0.4	100.50
		74.1	154.75	04/24/00	24.2 / 0.0	47.55	73.5	0.6	107.20

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		75	154 75	10/17/00	21 8 / 0 0	47.29	73 4	1 6	107 46
		74 1	154.75	10/25/00	21 8 / 0 0	47.29	73 4	0 7	107 46
		75	154 75	04/17/01	14 2 / 0.2	44.90	73.4	1 6	109 85
		74 1	154.75	07/17/01	14 2 / 0.2	44 40	73 3	0 8	110 35
		75	154.75	10/16/01	0 0 / 0 0	48.94	76.3	–	105 81
		75	154 75	01/15/02	0 0 / 0.0	47 61	76 0	–	107.14
		75	154 75	04/16/02	15 5 / 0 0	47.20	73.1	1 9	107 55
		75	154.75	07/24/02	6 1 / 0.1	51.67	73.3	1.7	103.08
		75	154 75	10/22/02	19 6 / 0.6	55.20	73.3	1.7	99 55
		75	154.75	01/24/03	3 9 / 0.1	53 09	73.3	1 7	101.66
		75	154 75	04/23/03	9 7 / 0 0	49 05	76 15	–	105.70
		75	154 75	07/29/03	6.3 / 0 0	52 31	76.10	–	102.44
		75	154.75	10/21/03	5.7 / 0.0	58.33	76.16	–	96.42
		75	154.75	01/21/04	22.0 / 0 0	59.87	76 33	–	94.88
		75	154 75	04/20/04	12 2 / 0.2	58 90	76.15	–	95 85
		75	154 75	07/20/04	0.0 / 0 0	62.00	76.05	–	92.75
		75	154.75	10/11/04	0.0 / 0.0	66.33	75 99	–	88.42
MW-04	45-75	75	149.76	04/25/1989	0 0 / 0.0	50.57	NM	–	99.19
		75	149 76	07/17/89	2.0 / 0.0	51.57	71.5	3.5	98.19
		75	149 76	10/23/89	0.0 / 0.0	54.84	67.7	7.3	94.92
		75	149 76	01/22/90	0 0 / 0.0	54.02	67.7	7.3	95.74
		75	149.76	04/09/90	49.0 / 0.0	52.26	68.2	6.8	97.50
		75	149.76	07/10/90	1.0 / 0.0	50.56	67.7	7.3	99.20
		75	149.90	10/15/90	2 0 / 0.0	51.57	72.4	2.6	98.33
		75	149 90	01/07/91	10.0 / 0.0	52.22	67.5	7.5	97.68
		75	149 90	04/08/91	0 0 / 0.0	49.40	67.0	8.0	100.50
		75	149 90	07/08/91	0 8 / 0.0	48.43	68 6	6.4	101.47
		75	149.90	10/21/91	4.2 / 0.0	48.99	69.6	5.4	100.91
		75	149 90	01/13/92	1.3 / 0 0	46.57	67.5	7.5	103.33
		75	149.90	03/30/92	0.0 / 0 0	43.96	67.5	7.5	105.94
		75	149.90	07/13/92	19.0 / 0.0	43.40	67.4	7.6	106.50
		75	149 90	10/13/92	11.5 / 0.0	45.98	67.4	7.6	103.92
		75	149 90	01/19/93	2.9 / 0.0	42.77	67 6	7.4	107.13
		75	149 90	04/19/93	0.0 / 0 0	34.90	67.8	7.2	115.00
		75	149.90	07/12/93	0.0 / 0.0	34 38	67.5	7.5	115.52
		75	149 90	10/12/93	0.2 / 0.0	34.14	67.6	7.4	115 76
		75	149 90	01/10/94	0.0 / 45.0	34.48	67.6	7 4	115.42
		75	149 90	04/11/94	0 7 / 4.0	33.70	67.2	7.8	116.20
		75	149 90	07/18/94	0.0 / 0.7	33.14	67.5	7.5	116.76
		75	149 90	10/10/94	4.2 / 167.0	39.04	67.6	7.4	110 86
		75	149 90	01/16/95	2.0 / 15 0	38.02	67.5	7.5	111 88
		75	149 90	04/17/95	0 0 / 3.6	32.21	67.6	7.4	117.69
		75	149 90	07/10/95	0.0 / 0.0	30.85	67.5	7.5	119.05
		75	149 90	10/09/95	0.0 / 4.4	34.55	67.6	7.4	115.35
		75	152.37	01/29/96	0 0 / 15 0	39 00	67.5	7.5	113.37
		75	152.37	04/15/96	0 0 / 21.0	35.72	67.3	7.7	116.65
		67 5	152 37	07/15/96	0 0 / 6 0	36.20	67.3	0.2	116.17
		67.5	152 37	10/07/96	0 7 / 4.1	39 99	67.3	0.2	112.38
		67.5	152 37	01/13/97	3 1 / 11.0	38.30	67.2	0 3	114 07
		67 5	152 37	04/15/97	0 6 / 3 5	35 41	67.2	0.3	116 96
		67.5	152 37	07/08/97	– / –	35 33	67 1	0.4	117.04
		67 5	152 37	10/14/97	20 0 / 0 0	38.91	70.3	–	113.46
		67.5	152 37	01/13/98	48 0 / 0 0	40.71	70.2	–	111.66
		67 5	152 37	04/21/98	261 0 / 0.1	35.68	67.7	–	116 69
		67.5	152 37	07/14/98	0.9 / 0.0	34 42	67.8	–	117 95
		67 5	152 37	10/19/98	8 0 / 0 0	37 06	67.6	–	115.31
		67 5	152 37	01/19/99	79 5 / 2 0	39 96	67.7	–	112.41
		67 5	152 37	04/20/99	17 5 / 0 0	39 94	67 8	–	112.43
		67 5	152 37	07/20/99	16 8 / 1 4	40 04	67 3	0.2	112 33
		67 5	152 37	10/22/99	0 0 / 0 0	47 88	67 8	–	104 49
		67 5	152 37	01/25/00	1 0 / 0.0	51 71	67 5	0.0	100 66
		67 5	152 37	04/24/00	14 2 / 0 0	45 36	68 0	–	107 01
		67 5	152 37	10/25/00	27 0 / 0 0	44.95	67.0	0.5	107.42
		67 5	152 37	04/17/01	20 1 / 0 0	42 61	67 0	0 5	109 76
		67 5	152 37	07/17/01	20.1 / 0 0	42 09	67.3	0.2	110.28

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		67 5	152 37	10/16/01	0 0 / 0 0	46 68	70 4	–	105 69
		67 5	152 37	01/15/02	2 3 / 0 0	45 35	70 3	–	107 02
		67 5	152 37	04/16/02	16 4 / 0.0	44 88	67.6	–	107.49
		67 5	152 37	07/24/02	0 8 / 0 0	49.27	70.5	–	103.10
		67 5	152 37	10/22/02	3 8 / 0.1	52.75	70 5	–	99.62
		67.5	152.37	01/24/03	0 1 / 0 1	50.81	70 5	–	101.56
		67.5	152 37	04/23/03	1.1 / 0.0	46.77	70.33	–	105.60
		67 5	152 37	07/29/03	6 4 / 0 1	49 77	70.38	–	102.60
		67 5	152 37	10/21/03	1 0 / 0 0	55 72	70.30	–	96.65
		67 5	152 37	01/21/04	2.2 / 0.0	57.31	70.14	–	95.06
		67.5	152 37	04/20/04	1.4 / 1.0	56.54	70.31	–	95.83
		67.5	152.37	07/20/04	0 0 / 0 0	59.50	70.2	–	92.87
		67 5	152.37	10/11/04	0 0 / 0.0	63.60	70.04	–	88.77
MW-04A	87-107	107 0	152.49	04/25/1989	0 0 0.0	54.21	107.7	–	98.28
		107 0	152.49	07/17/89	0 0 0.0	54.19	107.0	0.0	98.30
		107.0	152 49	10/23/89	0.0 0.0	57.41	107 5	–	95.08
		107.0	152 49	01/22/90	1.2 0 0	56 55	108 3	–	95.94
		107.0	152 49	04/09/90	8 0 0.0	54.62	108.7	–	97.87
		107.0	152.49	07/10/90	3 0 0.0	53 06	108.7	–	99 43
		107.0	152 46	10/15/90	1.0 0.0	54.05	108.4	–	98.41
		107.0	152.46	01/07/91	6.0 0.0	54.71	108.5	–	97.75
		107 0	152 46	04/08/91	0.0 0.0	51 90	106.0	1.0	100.56
		107 0	152.46	07/08/91	0 8 0 0	50 89	106 8	0.2	101.57
		107.0	152.46	10/21/91	4.3 0 0	51 46	106.8	0.2	101.00
		107 0	152.46	01/13/92	6.1 0.0	49 70	108.4	–	102.76
		107.0	152.46	03/30/92	0.0 0.0	46 48	110.0	–	105.98
		107 0	152.46	07/13/92	0 3 0 0	45 82	111.8	–	106.64
		107 0	152.46	10/13/92	5.1 0.0	46.78	106.8	0.2	105.68
		107.0	152.46	01/19/93	– –	45.00	104.3	2.7	107 46
		107 0	152.46	04/19/93	0.0 0.0	37.44	108.7	–	115.02
		107.0	152.46	07/12/93	0.0 0 0	36.88	108.5	–	115.58
		107 0	152 46	10/12/93	0 5 0.0	36.85	108.6	–	115.61
		107.0	152 46	01/10/94	0 0 0.5	36.92	108.6	–	115.54
		107.0	152.46	04/11/94	0 2 0.2	36.15	108.2	–	116.31
		107.0	152 46	07/18/94	0.0 0 0	35.62	108 5	–	116.84
		107 0	152 46	10/10/94	0 0 4 5	41.52	108 5	–	110.94
		107 0	152 46	01/16/95	1.2 3 6	40.50	108.5	–	111.96
		107.0	152 46	04/17/95	0 0 0.5	34 71	108.6	–	117.75
		107.0	152 46	07/10/95	0 0 0.0	33 33	108.5	–	119.13
		107.0	152 46	10/09/95	0 0 0.0	37 05	108.5	–	115.41
		107 0	152 46	01/29/96	0 0 2 6	39 00	108.8	–	113.46
		107.0	152.46	04/15/96	0.0 0.0	35.66	108 8	–	116 80
		107 0	152 46	07/15/96	0.0 0.0	36.17	108.8	–	116.29
		107.0	152.46	10/07/96	0.4 0 4	39 95	106.9	0.1	112.51
		107 0	152 46	01/13/97	1 7 1.0	38.26	106.9	0.1	114.20
		107 0	152.46	04/15/97	0 4 0.4	35.39	106.9	0.1	117.07
		107 0	152 46	07/08/97	– –	35.30	107.0	0.0	117.16
		107 0	152 46	10/14/97	0.0 0.0	38.85	108 6	–	113.61
		107 0	152 46	01/13/98	0 0 / 0.0	40.66	108.4	–	111.80
		107.0	152 46	04/21/98	0 0 / 0 0	35 63	106.6	0 4	116.83
		107 0	152 46	07/14/98	0 0 / 0 0	34 42	105 7	1.3	118.04
		107 0	152.46	10/19/98	0 0 / 0 0	37 03	106.8	0.2	115.43
		107 0	152 46	01/19/99	36 1 / 4 1	39 83	106 7	0.3	112.63
		107 0	152 46	04/20/99	0 0 / 0 0	39 88	106 6	0.4	112 58
		107 0	152 46	07/20/99	1.7 / 1 4	40 00	106.6	0.4	112 46
		107 0	152 46	10/22/99	0 0 / 0 0	47 82	106 6	0.4	104 64
		107 0	152 46	01/25/00	0 0 / 0 0	51 64	107 0	0.0	100 82
		107 0	152 46	04/24/00	0 0 / 0.0	45 16	106 7	0 3	107 30
		107 0	152 46	10/25/00	1 1 / 0 0	44 98	106 7	0 3	107 48
		107	152 46	04/17/01	2 0 / 0 5	42.13	107 0	0 0	110 33
		107 0	152 46	07/17/01	2 0 / 0.5	42 08	105.7	1 3	110 38
		107	152 46	10/16/01	0 0 / 0 0	46 55	108 8	–	105.91
		107	152 46	01/15/02	2 5 / 0 0	45 35	108.2	–	107 11
		107	152 46	04/16/02	5.4 / 0 0	44.84	105 5	1 5	107 62
		107	152 46	07/24/02	0 0 / 0.0	49.27	106 8	0.2	103 19

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		107	152.46	10/22/02	3 4 / 0.1	52 72	106 8	0.2	99.74
		107	152 46	01/24/03	5 8 / 0.1	50 78	106 8	0 2	101 68
		107	152 46	04/23/03	1 1 / 0.0	46 76	108 65	–	105.70
		107	152 46	07/29/03	8.2 / 0.1	49.89	108 54	–	102.57
		107	152.46	10/21/03	1.9 / 0 1	55 81	108.56	–	96.65
		107	152 46	01/21/04	0 0 / 0.0	57.49	108.62	–	94.97
		107	152.46	04/20/04	1.0 / 1.0	56 59	108 6	–	95.87
		107	152.46	07/20/04	0.0 / 0.0	59 61	108.42	–	92.85
		107	152.46	10/11/04	0 0 / 0.0	63 70	108.4	–	88.76
MW-05	45-75	75.0	153 26	01/13/98	0.9 / 0.0	42.33	—	–	110.93
		75.0	153 26	04/21/98	4435.0 / 0.1	37 32	—	–	115.94
		75 0	153 26	07/14/98	0.0 / 0.0	35 90	—	–	117.36
		75.0	153.26	10/19/98	220.0 / 0 0	38.46	—	–	114.80
		75.0	153.26	01/19/99	54.6 / 6.0	41.39	—	–	111.87
		75 0	153.26	04/20/99	1.1 / 0.0	41.56	—	–	111.70
		75 0	153.26	07/20/99	1 7 / 1.4	41.31	—	–	111.95
		75.0	153.26	10/22/99	0.0 / 0.0	49.31	—	–	103.95
		75.0	153.26	01/25/00	0 0 / 0.0	53.32	—	–	99.94
		75 0	153.26	04/24/00	0.0 / 0.0	46.85	—	–	106.41
		75	153.26	10/17/00	1.0 / 0.0	46.50	—	–	106.76
		75.0	153.26	10/25/00	1.0 / 0.0	46.50	—	–	106 76
		75	153.26	04/17/01	0.0 / 0.0	44.18	—	–	109.08
		75.0	153.26	07/17/01	0 0 / 0.0	43.50	—	–	109.76
		75	153.26	10/16/01	0.0 / 0.0	48.05	—	–	105.21
		75	153.26	01/15/02	– / -	46.93	73.0	2.0	106.33
		75	153.26	04/16/02	0.1 / 0.1	46.34	70.0	5.0	106.92
		75	153.26	07/24/02	0.1 / 0.1	50.77	73.3	1.7	102.49
		75	153.26	10/22/02	0.1 / 0.1	54.38	73.3	1.7	98.88
		75	153.26	01/24/03	0.1 / 0.1	52.42	73.3	1.7	100.84
		75	153.26	04/23/03	0 5 / 0.1	48.31	73.16	1.8	104.95
		75	153.26	07/29/03	0.0 / 0.0	51.37	73.20	1.8	101.89
		75	153.26	10/21/03	1.9 / 0.0	57.46	73.16	1.8	95.80
		75	153.26	01/21/04	0.0 / 0.0	59.23	73.30	1.7	94.03
		75	153.26	04/20/04	1.0 / 1.0	58.30	73.2	1.8	94.96
		75	153.26	07/20/04	0.0 / 0.0	61.39	73.06	1.9	91.87
		75	153.26	10/11/04	0.0 / 0.0	65.34	73.09	1 9	87.92
MW-06A	10-30	—	—	01/13/98	218.0 / 0.0	DRY	—	–	–
		—	—	04/21/98	134.0 / 0.1	DRY	—	–	–
		—	—	07/14/98	51.0 / 0.0	DRY	—	–	–
		—	—	10/19/98	151.0 / 0.0	DRY	—	–	–
		—	—	01/19/99	-	DRY	—	–	–
		—	—	04/20/99	117 0 / 0.0	DRY	—	–	–
		—	—	07/20/99	128.6 / 1.4	DRY	—	–	–
		—	—	10/22/99	13.3 / 0.0	DRY	—	–	–
		—	—	01/25/00	183.0 / 0.0	DRY	—	–	–
		—	—	04/24/00	– / –	DRY	—	–	–
		30	—	10/17/00	– / –	DRY	—	–	–
		—	—	10/25/00	– / –	DRY	—	–	–
		30	—	04/17/01	– / –	DRY	—	–	–
		—	—	07/17/01	– / –	DRY	—	–	–
		30	—	10/16/01	41.0 / 0.0	DRY	—	–	–
		30	—	01/15/02	– / –	DRY	—	–	–
		30	—	04/16/02	0.0 / 0.0	DRY	28.9	1.1	–
		30	—	07/24/02	116 0 / 0 0	DRY	29.2	0.8	–
		30	—	10/22/02	0.1 / 0 1	DRY	29.2	0.8	–
		30	—	01/24/03	0.1 / 0 1	DRY	29.2	0.8	–
		30	—	04/23/03	1 5 / 0 0	DRY	29 08	0 9	–
		30	—	07/29/03	117 0 / 0 0	DRY	29 04	1.0	–
		30	—	10/21/03	44 0 / 0.0	DRY	29 05	0.9	–
		30	—	01/21/04	0 0 / 0.0	DRY	29 01	1.0	–
		30	—	04/20/04	3.1 / 0 2	DRY	29 03	1.0	–
		30	—	07/20/04	1.4 / 0 4	DRY	29	1.0	–
		30	—	10/11/04	NM /	DRY	29.05	0.9	–

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
MW-06B	45-75	77.6	149.53	01/13/98	0.9 / 0.0	37.47	77.1	0.5	112.06
		77.6	149.53	04/21/98	0.1 / 0.1	32.77	77.0	0.6	116.76
		77.6	149.53	07/14/98	0.0 / 0.0	31.58	77.1	0.5	117.95
		77.6	149.53	10/19/98	2.9 / 1.4	34.70	77.1	0.5	114.83
		77.6	149.53	01/19/99	-	36.79	77.0	0.6	112.74
		77.6	149.53	04/20/99	1.1 / 0.0	36.97	76.9	0.7	112.56
		77.6	149.53	07/20/99	1.4 / 1.4	37.10	76.9	0.7	112.43
		77.6	149.53	10/22/99	0.0 / 0.0	44.49	77.0	0.6	105.04
		77.6	149.53	01/25/00	39.0 / 0.0	48.27	77.3	0.3	101.26
		77.6	149.53	04/24/00	– / –	42.32	76.9	0.7	107.21
		77	149.53	10/17/00	0.5 / 0.5	41.98	76.6	0.4	107.55
		77.6	149.53	10/25/00	0.5 / 0.5	41.98	76.6	1.0	107.55
		77	149.53	04/17/01	0.0 / 0.0	39.72	77.5	–	109.81
		77.6	149.53	07/17/01	0.0 / 0.0	39.24	76.5	1.1	110.29
		77	149.53	10/16/01	0.0 / 0.0	43.47	76.6	0.4	106.06
		77	149.53	01/15/02	0.2 / 0.0	42.52	76.3	0.7	107.01
		77	149.53	04/16/02	0.0 / 0.0	41.95	76.2	0.8	107.58
		77	149.53	07/24/02	0.0 / 0.0	46.09	76.4	0.6	103.44
		77	149.53	10/22/02	0.1 / 0.1	49.50	76.4	0.6	100.03
		77	149.53	01/24/03	0.1 / 0.1	47.83	76.4	0.6	101.70
		77	149.53	04/23/03	0.0 / 0.0	43.98	76.05	1.0	105.55
		77	149.53	07/29/03	0.2 / 0.0	46.75	75.88	1.1	102.78
		77	149.53	10/21/03	1.0 / 0.0	52.29	75.93	1.1	97.24
		77	149.53	01/21/04	0.0 / 0.0	54.05	76.00	1.0	95.48
		77	149.53	04/20/04	0.2 / 0.2	53.45	75.86	1.1	96.08
		77	149.53	07/20/04	0.4 / 0.4	56.15	75.73	1.3	93.38
		77	149.53	10/11/04	0.0 / 0.0	59.91	75.75	1.3	89.62
MW-06D	79-94	95.5	150.16	01/13/98	4.9 / 0.0	38.04	93.9	1.6	112.12
		95.5	150.16	04/21/98	3.9 / 0.1	33.36	93.5	2.0	116.80
		95.5	150.13	07/14/98	0.0 / 0.0	32.16	93.9	1.6	117.97
		95.5	150.13	10/19/98	837.0 / 0.0	34.61	93.9	1.6	115.52
		95.5	150.13	01/19/99	41.5 / 5.2	37.35	93.4	2.1	112.78
		95.5	150.13	04/20/99	5.8 / 0.0	37.51	90.3	5.2	112.62
		95.5	150.13	07/20/99	17.0 / 0.4	37.70	93.5	2.0	112.43
		95.5	150.13	10/22/99	0.0 / 0.0	45.03	93.4	2.1	105.10
		95.5	150.13	01/25/00	0.0 / 0.0	48.81	90.7	4.8	101.32
		95.5	150.13	04/24/00	– / –	42.88	90.5	5.0	107.25
		95.5	150.13	10/17/00	0.0 / 0.0	42.54	90.3	5.3	107.59
		95.5	150.13	10/25/00	0.0 / 0.0	42.54	90.3	5.3	107.59
		95.5	150.13	04/17/01	0.0 / 0.0	40.26	92.5	3.0	109.87
		95.5	150.13	07/17/01	0.0 / 0.0	39.82	90.6	5.0	110.31
		95.5	150.13	10/16/01	0.0 / 0.0	44.04	92.9	2.8	106.09
		95.5	150.13	01/15/02	0.0 / 0.0	43.12	92.3	3.2	107.01
		95.5	150.13	04/16/02	0.0 / 0.0	42.52	90.4	5.1	107.61
		95.5	150.13	07/24/02	0.0 / 0.0	46.65	92.9	2.6	103.48
		95.5	150.13	10/22/02	13.7 / 0.0	50.05	92.9	2.6	100.08
		95.5	150.13	01/24/03	0.1 / 0.1	48.40	92.9	2.6	101.73
		95.5	150.13	04/23/03	0.5 / 0.5	44.52	92.74	2.8	105.61
		95.5	150.13	07/29/03	0.3 / 0.1	47.27	92.57	2.9	102.86
		95.5	150.13	10/21/03	1.9 / 0.1	52.82	90.60	4.9	97.31
		95.5	150.13	01/21/04	0.0 / 0.0	54.63	90.76	4.7	95.50
		95.5	150.13	04/20/04	0.2 / 0.2	54.04	90.67	4.8	96.09
		95.5	150.13	07/20/04	0.4 / 0.4	56.65	90.57	4.9	93.48
		95.5	150.13	10/11/04	0.0 / 0.0	60.40	90.62	4.9	89.73
MW-07	45-75	71.6	149.42	01/13/98	56.0 / 1.9	37.95	71.5	0.1	111.47
		71.5	149.42	04/21/98	1.3 / 0.1	33.04	71.5	0.0	116.38
		71.5	149.42	07/14/98	0.0 / 0.0	31.80	71.4	0.0	117.62
		71.5	149.42	10/19/98	2.9 / 1.4	34.36	71.5	–	115.06
		71.5	149.42	01/19/99	-	37.14	71.6	–	112.28
		71.5	149.42	04/20/99	3.5 / 0.0	37.31	71.5	0.0	112.11
		71.5	149.42	07/20/99	4.3 / 1.4	37.33	71.5	0.0	112.09
		71.5	149.42	10/22/99	13.2 / 0.0	44.92	71.5	0.0	104.50
		71.5	149.42	01/25/00	7.0 / 0.0	48.75	71.5	0.0	100.67
		71.5	149.42	04/24/00	– / –	42.58	71.4	0.1	106.84

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		75	149 42	10/17/00	0.5 / 0.5	42 18	71 2	3 8	107.24
		71.5	149 42	10/25/00	0 5 / 0 5	42.18	71 2	0.3	107.24
		75	149 42	04/17/01	0 0 / 0 0	39.95	71.2	3 8	109 47
		71 5	149 42	07/17/01	0 0 / 0.0	39.44	71.4	0.1	109.98
		75	149 42	10/16/01	0 0 / 0.0	43.78	71.8	3 3	105.64
		75	149.42	01/15/02	0 7 / 0 0	42.72	71 0	4 0	106 70
		75	149 42	04/16/02	0 0 / 0 0	42.20	71.0	4.0	107.22
		75	149 42	07/24/02	0 8 / 0.0	46 46	71.2	3.8	102.96
		75	149 42	10/22/02	0 1 / 0 1	49 92	71.2	3 8	99.50
		75	149 42	01/24/03	4 7 / 0 1	48.14	71.2	3.8	101.28
		75	149 42	04/23/03	1.7 / 0.1	44 15	71 10	3 9	105.27
		75	149 42	07/29/03	0 8 / 0 0	46.98	71.05	4 0	102.44
		75	149 42	10/21/03	2 9 / 0 0	52 81	70 98	4 0	96.61
		75	149 42	01/21/04	0 0 / 0 0	54 59	71 24	3.8	94.83
		75	149 42	04/20/04	0.2 / 0.2	53 82	71	4.0	95.60
		75	149 42	07/20/04	0 4 / 0.4	56.56	70 95	4.1	92 86
		75	149.42	10/11/04	0.0 / 0.0	60 69	71.29	3.7	88.73
MW-08	41-71	71.0	149 98	01/13/98	227.0 / 0.0	38.02	—	—	111.96
		71 0	149 98	04/21/98	8748 0 / 0.1	33.03	—	—	116.95
		71 0	150.17	07/14/98	20.3 / 0.0	32.05	—	—	118.12
		71 0	150.17	10/19/98	142.0 / 0.0	34.61	—	—	115.56
		71 0	150 17	01/19/99	252.0 / 2.3	37.40	—	—	112.77
		71 0	150.17	04/20/99	37.2 / 0.0	37.50	—	—	112.67
		71 0	150.17	07/20/99	38.0 / 0.8	37.63	—	—	112.54
		71 0	150 17	10/22/99	20.1 / 0.0	45.29	—	—	104.88
		71 0	150.17	01/25/00	28 0 / 0.0	49 05	—	—	101 12
		71 0	150 17	04/24/00	32 0 / 0.0	42.73	—	—	107 44
		71	150 17	10/17/00	39 0 / 0.0	42.25	—	—	107.92
		71 0	150.17	10/25/00	39.0 / 0.0	42.25	—	—	107.92
		71	150 17	04/17/01	35.0 / 0.0	40.23	—	—	109.94
		71 0	150.17	07/17/01	35.0 / 0.0	39.70	—	—	110.47
		71	150.17	10/16/01	10 0 / 0 0	44.08	—	—	106 09
		71	150.17	01/15/02	– / –	42.92	70.1	0 9	107.25
		71	150.17	04/16/02	0 8 / 0.0	42.42	69.9	1 1	107.75
		71	150.17	07/24/02	0.6 / 0.0	46.73	70.3	0.8	103.44
		71	150.17	10/22/02	4.8 / 0.0	50.20	70 3	0 8	99.97
		71	150 17	01/24/03	1.1 / 0 1	48.28	70.3	0.8	101.89
		71	150 17	04/23/03	1 1 / 0.1	48.28	70.25	0.8	101.89
		71	150 17	07/29/03	5.1 / 0.1	47.38	70.17	0.8	102.79
		71	150 17	10/21/03	1.9 / 0 1	53.17	70.10	0.9	97.00
		71	150.17	01/21/04	2.2 / 0 0	54.75	70.20	0 8	95.42
		71	150 17	04/20/04	1.4 / 0.2	54.10	70.18	0.8	96 07
		71	150 17	07/20/04	0 9 / 0.4	57.00	70.02	1.0	93.17
		71	150.17	10/11/04	0 0 / 0 0	60 77	70.03	1.0	89.40
MW-09	44-77	73 5	152 96	01/13/98	23.4 / 0 0	40 90	75.5	–	112 06
		73 5	152 96	04/21/98	169 0 / 0.1	35 89	73.5	0.0	117 07
		73.5	152 96	07/14/98	27.5 / 0 0	34 70	73.6	0.0	118.26
		73 5	152 96	10/19/98	49 0 / 0.0	37.47	73.5	0 0	115.49
		73 5	152 96	01/19/99	45 9 / 1 0	40.28	73.4	0 1	112.68
		73 5	152 96	04/20/99	86 5 / 0 0	40.19	73.5	0 0	112.77
		73 5	152 96	07/20/99	15 1 / 0 8	40 39	73.5	0 0	112.57
		73 5	152 96	10/22/99	0 0 / 0 0	48.05	73.5	0.0	104 91
		73 5	152 96	01/25/00	29 0 / 0.0	51 81	73.5	0 0	101 15
		73 5	152 96	04/24/00	54.0 / 0 0	45 40	73.7	-0.2	107.56
		77	152 96	10/17/00	11 0 / 0 0	45.15	73.7	3.3	107.81
		73 5	152 96	10/25/00	11 0 / 0 0	45.15	73 7	–	107.81
		77	152 96	04/17/01	9 1 / 0 0	42 81	73 5	3.5	110 15
		73 5	152 96	07/17/01	9 1 / 0 0	42 33	72.7	0 8	110 63
		77	152 96	10/16/01	7 0 / 0 0	46 75	75 6	1.4	106.21
		77	152 96	01/15/02	0 6 / 0 0	45 57	75 3	1 7	107 39
		77	152 96	04/16/02	2 8 / 0 0	45 07	72 5	4 5	107 89
		77	152 96	07/24/02	6 1 / 0 0	49 45	72 8	4.2	103.51
		77	152 96	10/22/02	12 0 / 0 1	52 86	72 8	4.2	100 10
		77	152 96	01/24/03	4.2 / 0 1	50.94	72 8	4.2	102.02

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		77	152 96	04 23 03	4 0 / 0 5	46 83	75 64	1 4	106 13
		77	152 96	07/29/03	32 8 / 0 0	50 07	75 51	1.5	102 89
		77	152 96	10/21/03	21.1 / 0 0	55 90	75.62	1.4	97 06
		77	152 96	01/21/04	5 8 / 0 0	57 56	75 70	1.3	95.40
		77	152 96	04/20/04	2.2 / 0 2	56 72	75 63	1 4	96.24
		77	152 96	07/20/04	1 9 / 0 0	59 67	75 5	1.5	93.29
		77	152.96	10/11/04	0.0 / 0 0	63 61	75 48	1.5	89.35
MW-10	45-75	75 0	153 89	01/13/98	4 8 / 0 0	41.89	—	–	112.00
		75 0	153 89	04/21/98	107 0 / 0.1	36.84	—	–	117.05
		75 0	153 89	07/14/98	66.0 / 0.0	35 65	—	–	118.24
		75 0	153.89	10/19/98	43.0 / 0 0	38.26	—	–	115 63
		75 0	153 89	01/19/99	23.7 / 3 5	41.09	—	–	112.80
		75 0	153 89	04/20/99	71 8 / 0 0	41.08	—	–	112.81
		75 0	153 89	07/20/99	29.3 / 1 4	41.24	—	–	112.65
		75 0	153 89	10/22/99	16.7 / 0 0	49.01	—	–	104.88
		75 0	153 89	01/25/00	2.0 / 0.0	52.76	—	–	101.13
		75 0	153 89	04/24/00	8.2 / 0 0	46.41	—	–	107.48
		75	153 89	10/17/00	11.0 / 0 0	46.09	—	–	107.80
		75 0	153.89	10/25/00	11.0 / 0.0	46 09	—	–	107.80
		75	153 89	04/17/01	8 3 / 0.0	43.76	—	–	110.13
		75 0	153 89	07/17/01	8.3 / 0.0	43.30	—	–	110.59
		75	153 89	01/15/02	– / –	46.40	76.1	–	107.49
		75	153 89	04/16/02	4.6 / 0 0	46.02	74.0	1.0	107.87
		75	153 89	07/24/02	0.0 / 0 0	50.38	76.4	–	103.51
		75	153 89	10/22/02	1.0 / 0 0	53.84	76.4	–	100.05
		75	153 89	01/24/03	2.8 / 0.1	51.88	76.4	–	102.01
		75	153 89	04/23/03	1.0 / 0.5	47.77	76.17	–	106.12
		75	153.89	07/29/03	0.8 / 0.0	51.04	76.20	–	102.85
		75	153.89	10/21/03	1 8 / 0.0	56.88	76.15	–	97.01
		75	153 89	01/21/04	0.7 / 0.0	58.40	76.32	–	95.49
		75	153 89	04/20/04	1.0 / 1.4	57.58	76.26	–	96.31
		75	153 89	07/20/04	1 4 / 0.0	60.55	76.25	–	93.34
		75	153.89	10/11/04	0 0 / 0.0	64.57	76.2	–	89.32
MW-11	55-75	75 5	152 81	01/13/98	56.5 / 0 0	40.58	74.0	1.5	112.23
		75 5	152 81	04/21/98	3.5 / 0.0	35 45	74.0	1.5	117.36
		75 5	155 76	07/14/98	4.0 / 0.0	37.19	74.1	1.5	118.57
		75 5	155 76	10/19/98	2.9 / 1.4	39.85	74.1	1.4	115.91
		75 5	155 76	01/19/99	45 5 / 2.7	42.71	74.1	1.5	113.05
		75.5	155.76	04/20/99	79.2 / 1.1	42.62	73.8	1.7	113.14
		75 5	155.76	07/20/99	6 4 / 2.4	42 88	73.8	1.7	112.88
		75 5	155.76	10/22/99	3 8 / 0 0	50.71	74.2	1 3	105 05
		75 5	155.76	01/25/00	0 0 / 0.0	54 45	74 4	1.1	101.31
		75 5	155.76	04/24/00	2 0 / 0 0	47.85	74.05	1.5	107.91
		75 5	155 76	10/17/00	2 1 / 0.0	47.70	74.1	1.5	108.06
		75 5	155 76	10/25/00	2 1 / 0 0	47.70	74.1	1.5	108.06
		75 5	155.76	04/17/01	1 4 / 0.5	45.29	74.1	1.4	110.47
		75 5	155.76	07/17/01	1.4 / 0.5	44.90	73.8	1 7	110.86
		75 5	155.76	10/16/01	0 0 / 0.0	49.34	77.0	–	106.42
		75 5	155.76	01/15/02	0 0 / 0 0	48.00	76 8	–	107.76
		75 5	155 76	04/16/02	0.3 / 0 0	47.56	73.9	1.6	108.20
		75 5	155 76	07/24/02	3 2 / 0 0	52.00	75.1	0.4	103.76
		75 5	155 76	10/22/02	3 4 / 0.1	55.44	75 1	0.4	100 32
		75 5	155 76	01/24/03	22 8 / 0.1	53.28	75.1	0.4	102 48
		75 5	155 76	04/23/03	1.7 / 0 0	49.35	76.93	–	106.41
		75 5	155 76	07/29/03	5 6 / 0 0	52 68	77 08	–	103 08
		75 5	155 76	10/21/03	1 9 / 0 0	58 53	76 90	–	97.23
		75 5	155 76	01/21/04	0 0 / 0 0	59 97	76 93	–	95 79
		75 5	155 76	04/20/04	2 6 / 0.2	59 11	76 9	–	96 65
		75 5	155 76	07/20/04	6.7 / 0 0	62 30	76 8	–	93.46
		75 5	155 76	10/11/04	2 0 / 0 0	66.32	76 71	–	89.44
MW-12D	84 5-100	101 0	152.63	01/13/98	0 / 0 0	39 94	—	–	112 69
		101 0	152 63	04/21/98	1.3 / 0 0	34.85	—	–	117 78
		101 0	155.72	07/14/98	0.4 / 0.0	36 93	—	–	118.79

Table B-1
Phibrotech, Inc
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		101 0	155 72	10/19/98	2 9 / 1 4	39 59	---	–	116 13
		101 0	155 72	01/19/99	-	42 35	—	–	113 37
		101 0	155 72	04/20/99	1 0 / 0.0	42 22	—	–	113 50
		101 0	155 72	07/20/99	1 7 / 1.4	42 58	—	–	113.14
		101 0	155 72	10/22/99	0 0 / 0 0	50 32	—	–	105 40
		101 0	155.72	01/25/00	0 0 / 0.0	53 93	—	–	101.79
		101.0	155 72	04/24/00	0.0 / 0 0	47.49	—	–	108.23
		101	155.72	10/17/00	0 0 / 0 0	47 34	—	–	108 38
		101 0	155 72	10/25/00	0.0 / 0 0	47 34	—	–	108 38
		101	155 72	04/17/01	0.0 / 0 0	44 95	—	–	110 77
		101 0	155.72	07/17/01	0.0 / 0 0	44 95	—	–	110.77
		101	155.72	10/16/01	0.0 / 0 0	48 33	—	–	107.39
		101	155 72	01/15/02	– / –	47 67	102 6	–	108 05
		101	155 72	04/16/02	0.0 / 0 0	47.27	99 6	1.4	108.45
		101	155.72	07/24/02	0 6 / 0 0	51 65	99 7	1 3	104.07
		101	155.72	10/22/02	10.2 / 0 0	55 08	99.7	1.3	100 64
		101	155.72	01/24/03	0.1 / 0.1	52 91	99 7	1 3	102 81
		101	155 72	04/23/03	1.1 / 0 1	49 07	102 85	–	106.65
		101	155 72	07/29/03	0.0 / 0 0	52.35	102.87	–	103.37
		101	155.72	10/21/03	0.0 / 0.0	58.20	102.75	–	97.52
		101	155.72	01/21/04	0 0 / 0 0	59.69	102.83	–	96.03
		101	155.72	04/20/04	0.2 / 0.2	58 88	102.88	–	96.84
		101	155.72	07/20/04	0.0 / 0.0	61 98	102.75	–	93.74
		101	155.72	10/11/04	0.0 / 0.0	65.79	107.72	–	89.93
MW-12S	51-72	72 0	152 64	01/13/98	75 / 0.0	39.96	—	–	112.68
		72 0	152.64	04/21/98	21 / 0.0	34 83	—	–	117.81
		72 0	155 79	07/14/98	0 / 0 0	36 96	—	–	118.83
		72 0	155.79	10/19/98	2.9 / 1 4	39.53	—	–	116.26
		72 0	155.79	01/19/99	-	42.29	—	–	113.50
		72 0	155.79	04/20/99	-	42.29	—	–	113 50
		72.0	155.79	07/20/99	7.3 / 1 4	42 55	—	–	113.24
		72 0	155.79	10/22/99	31 / 0 0	50.27	—	–	105.52
		72 0	155.79	01/25/00	69 / 0.0	53.89	—	–	101.90
		72.0	155.79	04/24/00	1.2 / 0.0	47.44	—	–	108.35
		72	155 79	10/17/00	0.0 / 0.0	47.27	—	–	108.52
		72 0	155.79	10/25/00	0.0 / 0.0	47 27	—	–	108.52
		72	155 79	04/17/01	0.0 / 0 0	44 92	—	–	110.87
		72.0	155 79	07/17/01	0.0 / 0.0	44.49	—	–	111.30
		72	155.79	10/16/01	0.0 / 0.0	48.25	—	–	107.54
		72	155.79	01/15/02	– / –	47.60	74.4	–	108.19
		72	155 79	04/16/02	1.7 / 0.0	47.19	71.7	0 3	108.60
		72	155 79	07/24/02	42.7 / 0.0	51.59	74.8	–	104.20
		72	155 79	10/22/02	33.3 / 0.0	55 01	74.8	–	100.78
		72	155 79	01/24/03	5 8 / 0.1	52 84	74.8	–	102.95
		72	155 79	04/23/03	1 1 / 0 1	49 00	74.60	–	106.79
		72	155 79	07/29/03	35.8 / 0 1	52.27	74 75	–	103.52
		72	155 79	10/21/03	1 8 / 0 1	58.10	74 65	–	97.69
		72	155.79	01/21/04	1 9 / 0 0	59 53	74 93	–	96.26
		72	155 79	04/20/04	0.2 / 0.2	58 80	74 83	–	96.99
		72	155 79	07/20/04	0 0 / 0.0	61.83	74.77	–	93.96
		72	155 79	10/11/04	0.0 / 0 0	65 64	74 65	–	90.15
MW-13D	78 3-93 3	93.3	151.52	01/13/98	0.0 / 0.0	39 01	—	–	112.51
		93 3	151.52	04/21/98	2.0 / 0.1	34 04	—	–	117.48
		93 3	151.68	07/14/98	0.8 / 0 0	33 14	—	–	118.54
		93 3	151 68	10/19/98	0 0 / 0 0	35 47	---	–	116.21
		93 3	151 68	01/19/99	11.2 / 3.0	38 47	—	–	113.21
		93 3	151 68	04/20/99	1 1 / 0 0	38 45	—	–	113.23
		93 3	151 68	07/20/99	2 4 / 2 4	38 68	—	–	113 00
		93 3	151 68	10/22/99	3 0 / 0 0	46 38	—	–	105 30
		93 3	151 68	01/25/00	0 0 / 0 0	50 02	—	–	101.66
		93 3	151 68	04/24/00	1 2 / 0 0	43 70	—	–	107 98
		93 3	151 68	10/17/00	0 0 / 0 0	43 53	—	–	108 15
		93.3	151 68	10/25/00	0 0 / 0 0	43 53	—	–	108.15
		93.3	151 68	04/17/01	0 0 / 0 0	41.07	—	–	110 61

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		93 3	151 68	07/17/01	0 0 / 0 0	40 75	--	–	110 93
		93 3	151 68	10/16/01	0 0 / 0 0	45 10	—	–	106.58
		93.3	151 68	01/15/02	– / –	43 78	93 4	–	107.90
		93 3	151 68	04/16/02	2.1 / 0 0	43 43	93.4	–	108.25
		93 3	151 68	07/24/02	0 3 / 0 1	47.76	93.8	–	103.92
		93 3	151 68	10/22/02	29.3 / 0.1	51.18	93.8	–	100.50
		93 3	151.68	01/24/03	5 8 / 0 1	49.17	93 8	–	102.51
		93 3	151 68	04/23/03	9.2 / 0.1	45.28	93.61	–	106.40
		93 3	151 68	07/29/03	4.2 / 0.0	48.43	93 60	–	103.25
		93 3	151 68	10/21/03	1.0 / 0.0	54.20	93 60	–	97 48
		93 3	151 68	01/21/04	0.0 / 0.0	55.72	93.70	–	95.96
		93 3	151.68	04/20/04	1.6 / 0.2	55 05	93.6	–	96.63
		93.3	151.68	07/20/04	0 0 / 0.0	57.94	93.5	–	93.74
		93.3	151.68	10/11/04	0 0 / 0 0	61 82	93.5	–	89.86
MW-13S	50 3-70.3	70.3	151.51	01/13/98	26 0 / 0.0	39.10	—	–	112.41
		70.3	151.51	04/21/98	6.5 / 0.1	34.03	—	–	117.48
		70 3	151.72	07/14/98	2 4 / 0.0	33.16	—	–	118.56
		70.3	151.72	10/19/98	17.0 / 0.0	35 44	—	–	116.28
		70 3	151 72	01/19/99	65.1 / 0.8	38 51	—	–	113.21
		70.3	151.72	04/20/99	2 3 / 1.1	38.46	—	–	113.26
		70.3	151.72	07/20/99	5.2 / 2.1	38.71	—	–	113.01
		70 3	151.72	10/22/99	13.6 / 0.0	46.37	—	–	105.35
		70 3	151 72	01/25/00	7.0 / 0.0	50.04	—	–	101.68
		70.3	151.72	04/24/00	0.0 / 0.0	43.70	—	–	108.02
		70.3	151.72	10/17/00	3 8 / 0.0	43.52	—	–	108.20
		70.3	151.72	10/25/00	3 8 / 0.0	43.52	—	–	108.20
		70.3	151.72	04/17/01	2.1 / 0.0	41.09	—	–	110.63
		70.3	151.72	07/17/01	2.1 / 0.0	40.76	—	–	110.96
		70.3	151.72	10/16/01	0.9 / 0.0	45.11	—	–	106.61
		70.3	151.72	01/15/02	– / –	43.89	69.0	1.3	107.83
		70.3	151.72	04/16/02	0.8 / 0.0	43.44	69.1	1.2	108.28
		70 3	151.72	07/24/02	3.4 / 0.0	47 78	69.3	1.0	103.94
		70.3	151.72	10/22/02	29.3 / 0.0	51.20	69.3	1.0	100.52
		70 3	151.72	01/24/03	3 6 / 0.0	49.16	69.3	1.0	102.56
		70 3	151.72	04/23/03	3 8 / 0.1	45 30	69.38	0.9	106.42
		70 3	151.72	07/29/03	4 6 / 0.1	48.44	69.24	1.1	103.28
		70.3	151.72	10/21/03	1.9 / 0.1	54.26	69.25	1.1	97.46
		70 3	151 72	01/21/04	2.9 / 0.0	55 70	69.47	0.8	96.02
		70.3	151.72	04/20/04	2 2 / 0.2	55 02	69.44	0.9	96.70
		70 3	151.72	07/20/04	1.9 / 0 0	57.90	69.25	1.1	93.82
		70.3	151.72	10/11/04	0 0 / 0 0	61.70	69 37	0.9	90.02
MW-14D	88-103	109 0	150.56	01/13/98	0.0 / 0.0	39.12	—	–	111.44
		109 0	150 56	04/21/98	0.1 / 0.1	34.09	—	–	116.47
		109 0	150 56	07/14/98	0 0 / 0.0	32.78	—	–	117.78
		109 0	150 56	10/19/98	7.0 / 0.0	35.38	—	–	115.18
		109 0	150.56	01/19/99	21.2 / 4.3	38.24	—	–	112.32
		109 0	150 56	04/20/99	0.0 / 0 0	38.35	—	–	112.21
		109.0	150.56	07/20/99	1.4 / 1.4	38 37	—	–	112.19
		109 0	150.56	10/22/99	0 0 / 0.0	46 21	—	–	104.35
		109.0	150 56	01/25/00	0 0 / 0.0	50 10	—	–	100.46
		109 0	150 56	04/24/00	0 0 / 0.0	43 65	—	–	106.91
		103 3	150 56	10/17/00	1 4 / 0 0	43 51	—	–	107.05
		109 0	150.56	10/25/00	1 4 / 0 0	43.51	—	–	107.05
		103.3	150.56	04/17/01	1 4 / 0.0	41.16	—	–	109.40
		109 0	150 60	07/17/01	1 4 / 0 0	40 53	—	–	110.07
		103 3	150 60	10/16/01	0 0 / 0.0	45.07	—	–	105.53
		103 3	150 60	01/15/02	– / –	43 90	—	–	106.70
		103 3	150 60	04/16/02	0 0 / 0 0	43 35	103 8	–	107.25
		103 3	150 60	07/24/02	0 0 / 0.0	47 88	104 0	–	102.72
		103 3	150 60	10/22/02	35 8 / 0 0	51 30	104 0	–	99.30
		103 3	150 60	01/24/03	0.1 / 0 1	49 35	103 0	0 3	101.25
		103 3	150 60	04/23/03	1.7 / 0 0	45 28	103 91	–	105.32
		103 3	150 60	07/29/03	0 0 / 0 0	48 36	104.56	–	102.24
		103 3	150 60	10/21/03	1 7 / 0 0	54 36	103 86	–	96.24

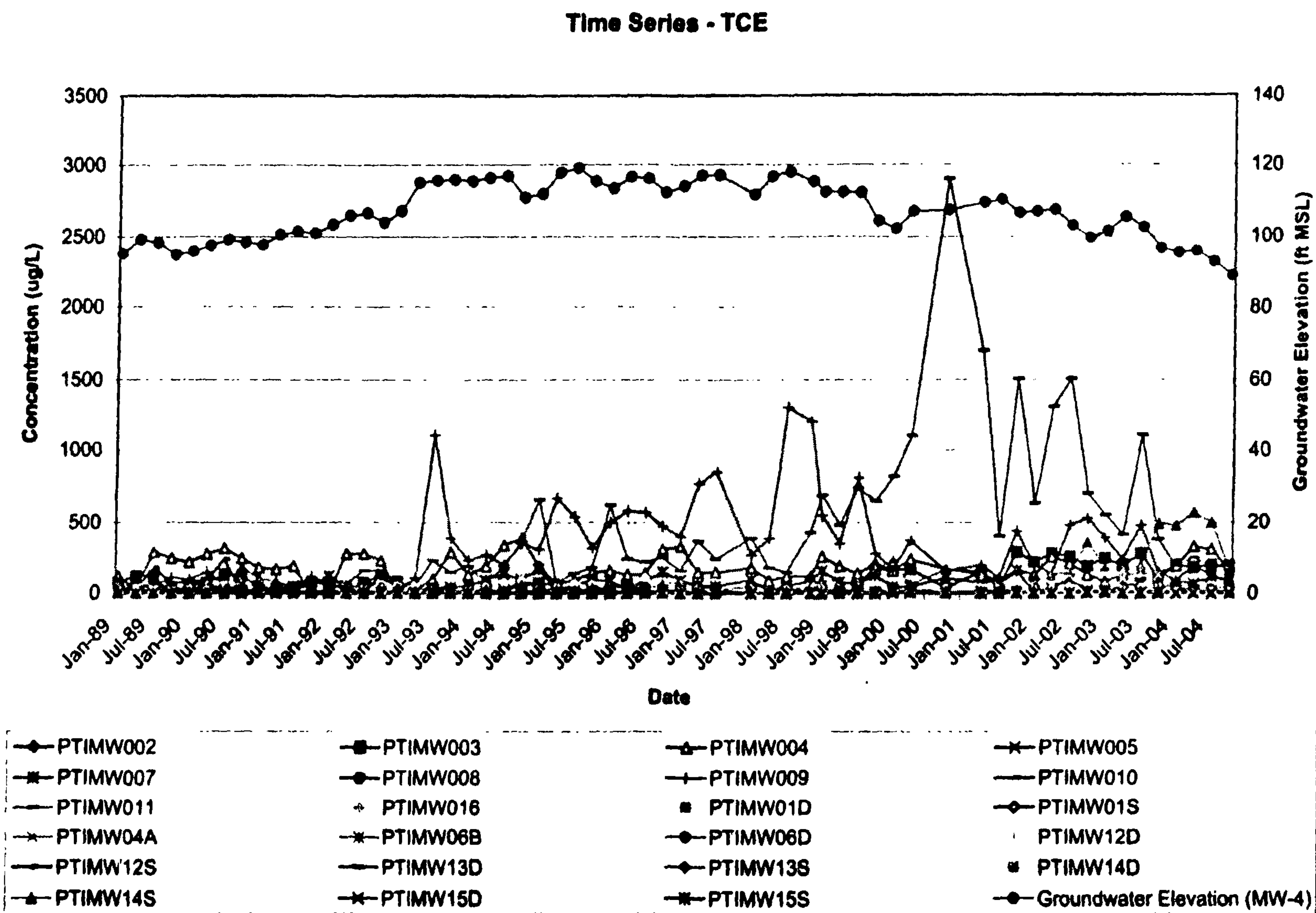
Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		103 3	150 60	01/21/04	0 7 / 0 0	56 03	104 02	–	94.57
		103 3	150 60	04/20/04	1 0 / 1 0	55 18	104	–	95.42
		103 3	150 60	07/20/04	0 0 / 0 0	58.20	103 82	–	92.40
		103.3	150 60	10/11/04	0 0 / 0 0	62.27	103 67	–	88 33
MW-14S	46-72	71 5	150 50	01/13/98	15.6 / 0 0	39 07	70 8	0.8	111.43
		71 5	150 50	04/21/98	1 0 / 0 1	34.03	70.7	0 8	116.47
		71.5	150 50	07/14/98	0.1 / 0 0	32.71	70.8	0.7	117.79
		71 5	150 50	10/19/98	2.0 / 0 0	35.31	70.8	0.8	115.19
		71 5	150 50	01/19/99	28 6 / 13 5	38.19	70.8	0.8	112.31
		71 5	150 50	04/20/99	7 0 / 1.0	38 29	70.7	0 8	112.21
		71.5	150 50	07/20/99	17.2 / 1.4	38.31	70 7	0.8	112.19
		71.5	150 50	10/22/99	53.0 / 0 0	46.19	70.8	0.7	104.31
		71.5	150.50	01/25/00	71 0 / 0.0	50.07	71.0	0.5	100.43
		71 5	150.50	04/24/00	23.0 / 0.0	43.59	70 9	0.6	106.91
		71.5	150 50	10/17/00	19 0 / 0.0	43.44	70.4	1.1	107.06
		71 5	150 50	10/25/00	19 0 / 0 0	43.44	70.4	1.1	107.06
		71 5	150 50	04/17/01	15.2 / 0.1	41 08	70.4	1.1	109.42
		71.5	150 54	07/17/01	15.2 / 0.1	40 47	70.9	0.6	110.07
		71.5	150 54	10/16/01	4.0 / 0 0	45 00	70.9	0.6	105.54
		71 5	150.54	01/15/02	2 6 / 0 0	43 80	70.6	0.9	106.74
		71.5	150.54	04/16/02	9.6 / 0.0	43.27	70.6	0.9	107.27
		71.5	150 54	07/24/02	19.0 / 0 0	47.70	71.0	0.5	102.84
		71.5	150 54	10/22/02	31.7 / 0.2	51.24	71.0	0.5	99.30
		71.5	150.54	01/24/03	22.7 / 0 1	49.27	71.0	0.5	101.27
		71.5	150.54	04/23/03	45.8 / 0 0	45.19	70.76	0.7	105.35
		71.5	150 54	07/29/03	18 4 / 0.0	48.30	70.82	0.7	102.24
		71.5	150.54	10/21/03	5 7 / 0.0	54.18	70.75	0.8	96.36
		71.5	150 54	01/21/04	2.2 / 0.0	55.89	70.87	0.6	94.65
		71.5	150 54	04/20/04	15.0 / 1.0	55.08	70.77	0.7	95.46
		71.5	150.54	07/20/04	2.8 / 0.0	58.00	70.6	0.9	92.54
		71.5	150.54	10/11/04	0.0 / 0.0	62.20	70.49	1.0	88.34
MW-15D	108 5-123.5	123.8	150.96	01/13/98	0.0 / 0.0	39 99	123.6	0.2	110.97
		123.8	150.96	04/21/98	11 7 / 0.1	34 92	123 8	0.0	116.04
		123.8	150.96	07/14/98	0 0 / 0 0	33.63	123.8	0.0	117.33
		123.8	150.96	10/19/98	1.4 / 1.4	36.24	124.1	–	114.72
		123.8	150 96	01/19/99	28.4 / 2.5	39.04	124.0	–	111.92
		123.8	150 96	04/20/99	1.1 / 0 0	39.15	123.9	–	111.81
		123.8	150 96	07/20/99	1.4 / 1.4	39.22	123.9	–	111.74
		123.8	150 96	10/22/99	0 0 / 0 0	47.08	124.0	–	103.88
		123 8	150.96	01/25/00	0.0 / 0 0	50.95	124.3	–	100.01
		123.8	150.96	04/24/00	0 0 / 0.0	44.42	124.0	–	106.54
		123 8	150.96	10/17/00	1.8 / 0.0	44.27	123.7	0.1	106.69
		123 8	150.96	10/25/00	1.8 / 0 0	44.27	123.7	0.1	106 69
		123 8	150 96	04/17/01	0 0 / 0 0	41.92	123.4	0.4	109.04
		123 8	150.96	07/17/01	0 0 / 0 0	41.34	123.8	0.0	109.62
		123 8	150 96	10/16/01	0 0 / 0 0	45.88	123.9	–	105.08
		123.8	150 96	01/15/02	0 0 / 0.0	44 64	124.5	–	106.32
		123 8	150.96	04/16/02	0 0 / 0 0	44 13	123.8	0.0	106.83
		123.8	150 96	07/24/02	0 0 / 0 0	48 60	123 8	0.0	102.36
		123 8	150 96	10/22/02	38 1 / 0 0	51.95	123.8	0.0	99.01
		123 8	150 96	01/24/03	0 1 / 0.1	50.11	123 8	0.0	100.85
		123 8	150 96	04/23/03	0 0 / 0 0	46 10	124 05	–	104.86
		123 8	150 96	07/29/03	0.2 / 0.0	49.24	124 92	–	101.72
		123 8	150 96	10/21/03	1 1 / 0 0	55.27	124.10	–	95.69
		123 8	150 96	01/21/04	0 7 / 0 0	56 87	124 05	–	94 09
		123 8	150 96	04/20/04	0 4 / 0 4	55.98	124.06	–	94 98
		123 8	150 96	07/20/04	0 9 / 0 0	59 14	123 77	–	91.82
		123 8	150 96	10/11/04	0 0 / 0 0	63.31	123 92	–	87.65
MW-15S	51.5-71 5	71.5	151 01	01/13/98	0 9 / 0 0	39 95	71.5	0.0	111 06
		71 5	151 01	04/21/98	237 0 / 0 1	34 96	71.4	0.1	116.05
		71 5	151 01	07/14/98	0 0 / 0 0	33 54	71.4	0 1	117.47
		71 5	151 01	10/19/98	2 0 / 0 0	36 14	71 4	0.1	114 87
		71 5	151 01	01/19/99	31.4 / 1.9	39 03	71.5	0.0	111.98

Table B-1
Phibrotech, Inc.
Groundwater Elevations

Well ID	Perforated Intervals (feet bgs)	Total Depth Constructed (feet bgs)	MP Elevation (feet MSL)	Date	Well Headspace* (ppm)	Depth to Water (feet below MP)	Total Depth Measured (feet bgs)	Calculated Casing Fill (feet)	Groundwater Elevation (feet MSL)
		71 5	151 01	04/20/99	2 3 / 1 1	39.16	71.4	0.1	111 85
		71.5	151 01	07/20/99	1 7 / 1 4	39 12	71 4	0.1	111 89
		71 5	151 01	10/22/99	0 0 / 0 0	46 94	71.4	0.1	104.07
		71 5	151 01	01/25/00	4 0 / 0 0	50.92	71.5	0.0	100.09
		71.5	151.01	04/24/00	1.2 / 0 0	44.45	71.4	0.1	106 56
		71.5	151 01	10/17/00	0 0 / 0.0	44.19	71.2	0.3	106 82
		71 5	151 01	10/25/00	0.0 / 0 0	44.19	71.2	0.3	106 82
		71.5	151.01	04/17/01	0 0 / 0 0	41 88	71.4	0.1	109.13
		71.5	151.01	07/17/01	0 0 / 0 0	41.17	71.4	0.1	109.84
		71.5	151 01	10/16/01	0.0 / 0 0	45.74	71.6	–	105.27
		71.5	151.01	01/15/02	0 0 / 0 0	44 64	71.2	0 3	106.37
		71.5	151 01	04/16/02	0.0 / 0.0	44.02	71.3	0.2	106.99
		71 5	151 01	07/24/02	0.1 / 0 1	48.44	71.0	0.5	102.57
		71.5	151 01	10/22/02	30.8 / 0.1	51 98	71.0	0.5	99 03
		71.5	151.01	01/24/03	0 4 / 0 1	50.10	71.0	0.5	100.91
		71.5	151 01	04/23/03	4.0 / 0.1	46.02	71.46	0.0	104.99
		71.5	151 01	07/29/03	0.6 / 0 0	49.02	71.40	0.1	101.99
		71.5	151 01	10/21/03	0.0 / 0 0	55.02	71.43	0.1	95.99
		71.5	151 01	01/21/04	0.0 / 0.0	56.77	71.49	0.0	94.24
		71 5	151 01	04/20/04	0.4 / 0.4	55.88	71.47	0.0	95.13
		71.5	151.01	07/20/04	0.9 / 0.0	58.85	71.25	0.3	92.16
		71.5	151.01	10/11/04	0.0 / 0.0	63.02	71.45	0.0	87.99
MW-16	42-62	62 5	150.22	01/13/98	33.1 / 0.0	38.30	61.9	0.6	111.92
		62 5	150.22	04/21/98	9.1 / 0.1	33.43	61.9	0.6	116.79
		62.5	150.27	07/14/98	5.0 / 0.4	32.27	62.0	0.5	118.00
		62 5	150.27	10/19/98	16.0 / 0.0	34.85	62.0	0.5	115.42
		62.5	150.27	01/19/99	51.0 / 3.4	37.59	62.0	0.5	112.68
		62.5	150.27	04/20/99	14.0 / 1.1	37.68	62.0	0.5	112.59
		62.5	150.27	07/20/99	10.2 / 1.4	37.84	62.0	0.5	112.43
		62.5	150.27	10/22/99	35.7 / 0.0	45.46	62.0	0.5	104.81
		62.5	150.27	01/25/00	9.0 / 0.0	49.24	62.4	0.1	101.03
		62.5	150.27	04/24/00	– / –	43.02	62.0	0.5	107.25
		62.5	150.27	10/17/00	6.3 / 0.0	42.76	61.8	0.8	107.51
		62.5	150.27	10/25/00	6.3 / 0.0	42.76	61.8	0.8	107.51
		62 5	150.27	04/17/01	3.2 / 0.0	40.40	62.0	0.5	109.87
		62.5	150.27	07/17/01	3.2 / 0 0	39.93	61.8	0.7	110.34
		62.5	150.27	10/16/01	0.0 / 0.0	44.29	62.2	0.3	105.98
		62.5	150.27	01/15/02	0.6 / 0 0	43.10	62.2	0.3	107.17
		62.5	150.27	04/16/02	7.7 / 0.1	42.67	61.9	0.6	107.60
		62.5	150.27	07/24/02	0.8 / 0.0	46.96	62.2	0.3	103.31
		62 5	150.27	10/22/02	2.8 / 0.0	50.43	62.2	0.3	99.84
		62.5	150.27	01/24/03	2.1 / 0.1	48.50	62.2	0.3	101.77
		62.5	150.27	04/23/03	2.8 / 0.1	44.62	62.13	0.4	105.65
		62.5	150.27	07/29/03	3.7 / 0.0	44.49	62.12	0.4	105.78
		62.5	150.27	10/21/03	– / 0.0	53.32	62.11	0.4	96.95
		62.5	150.27	01/21/04	1.4 / 0.0	54.94	62.11	0.4	95.33
		62 5	150.27	04/20/04	36.0 / 0.2	54 30	62.1	0.4	95.97
		62.5	150.27	07/20/04	1.4 / 0 4	57.15	62	0.5	93.12
		62.5	150.27	10/11/04	0.0 / 0.0	61.15	62	0.5	89.12

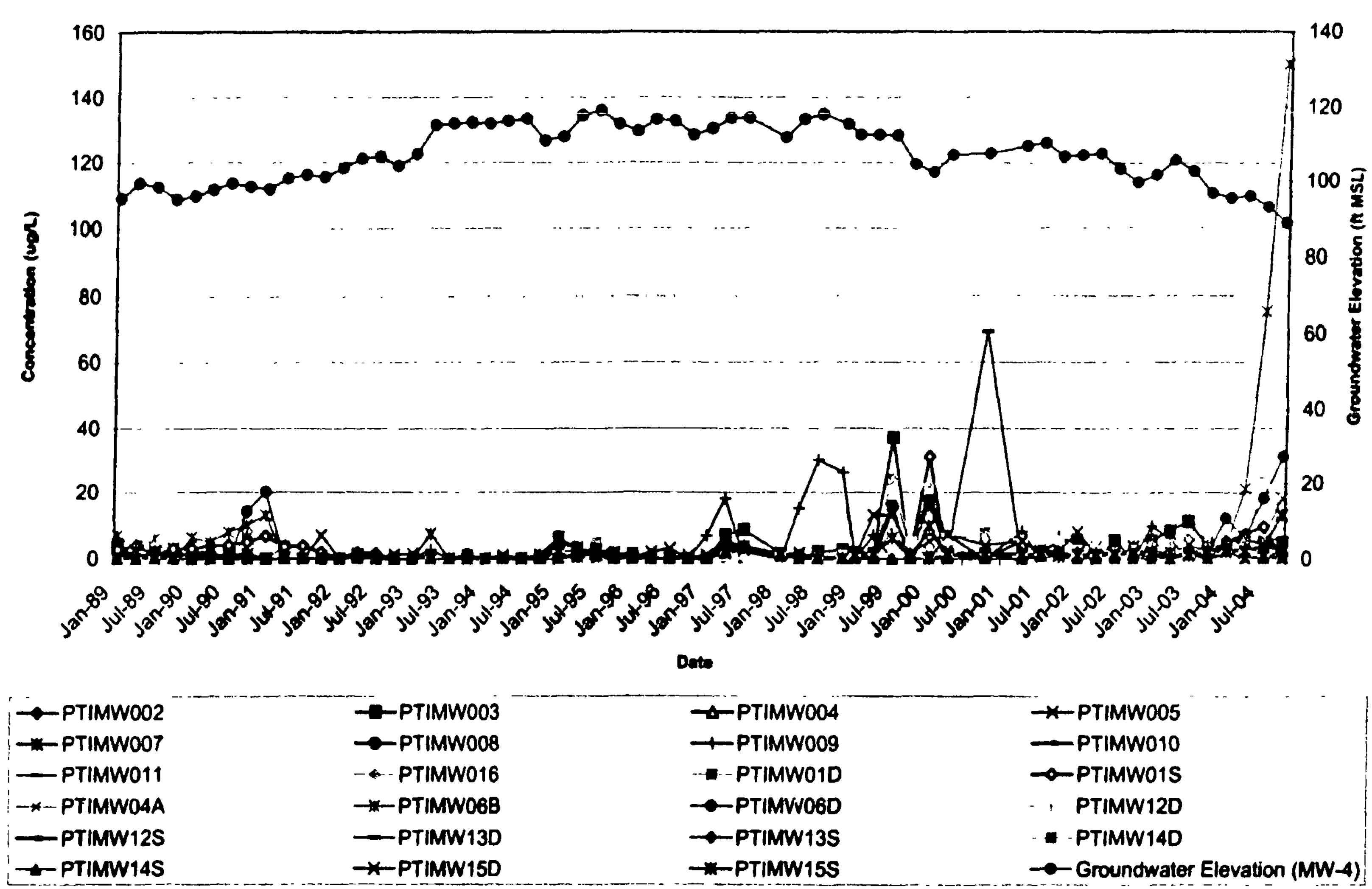
MP = Measuring point (top of steel casing)
--- = Not measured or not calculated
bgs = below ground surface
ppm = parts per million
NM = Not measured
MSL = mean sea level
* Measured with PID prior to sampling (casing/background)



Time Series - TCE
3500
3000
2500
2000
1500
1000
500
0
140
120
100
80
60
40
20
0
Concentration (ug/L)
Groundwater Elevation (ft MSL)
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Date
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

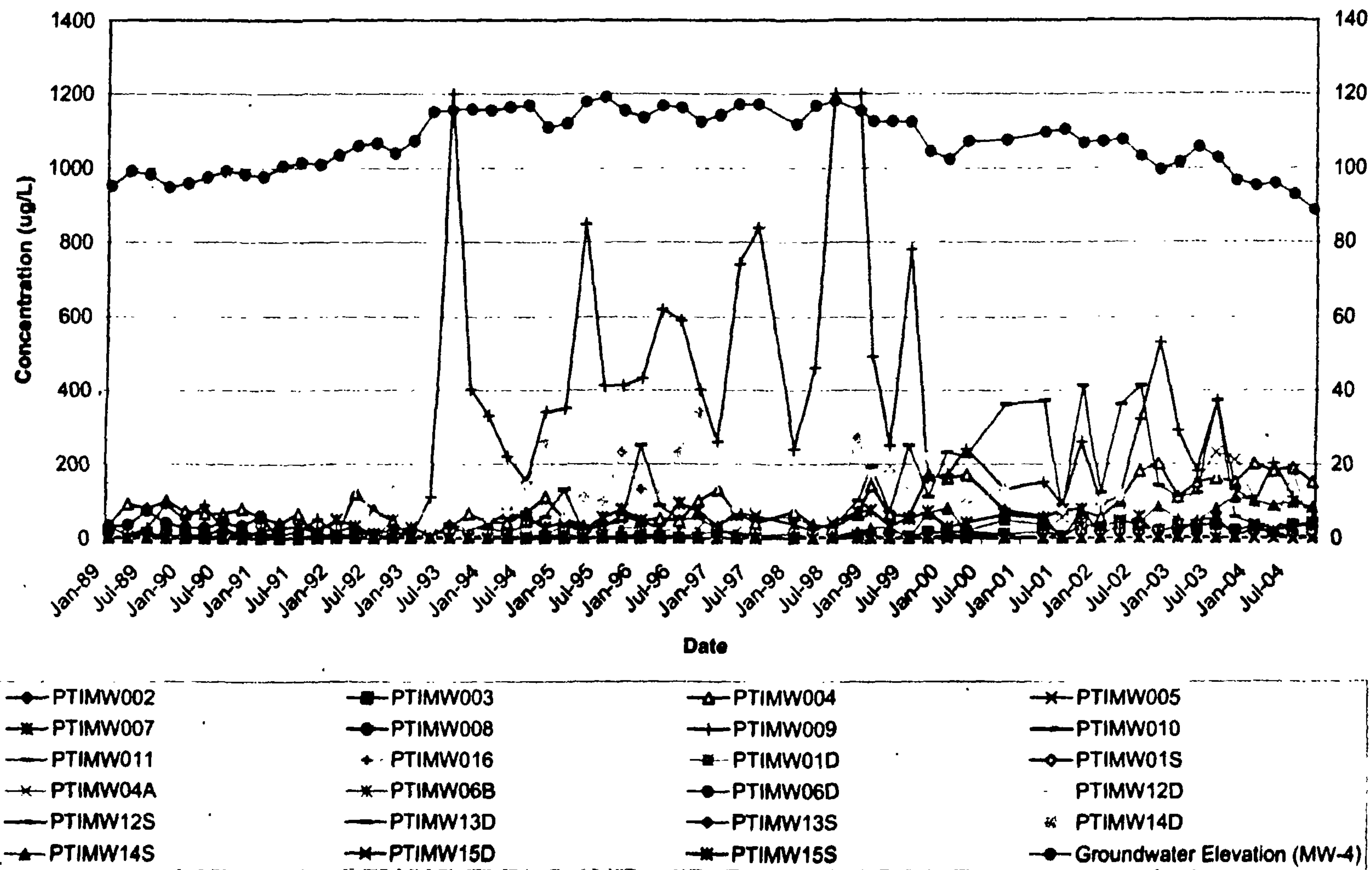
CDM

Time Series - PCE

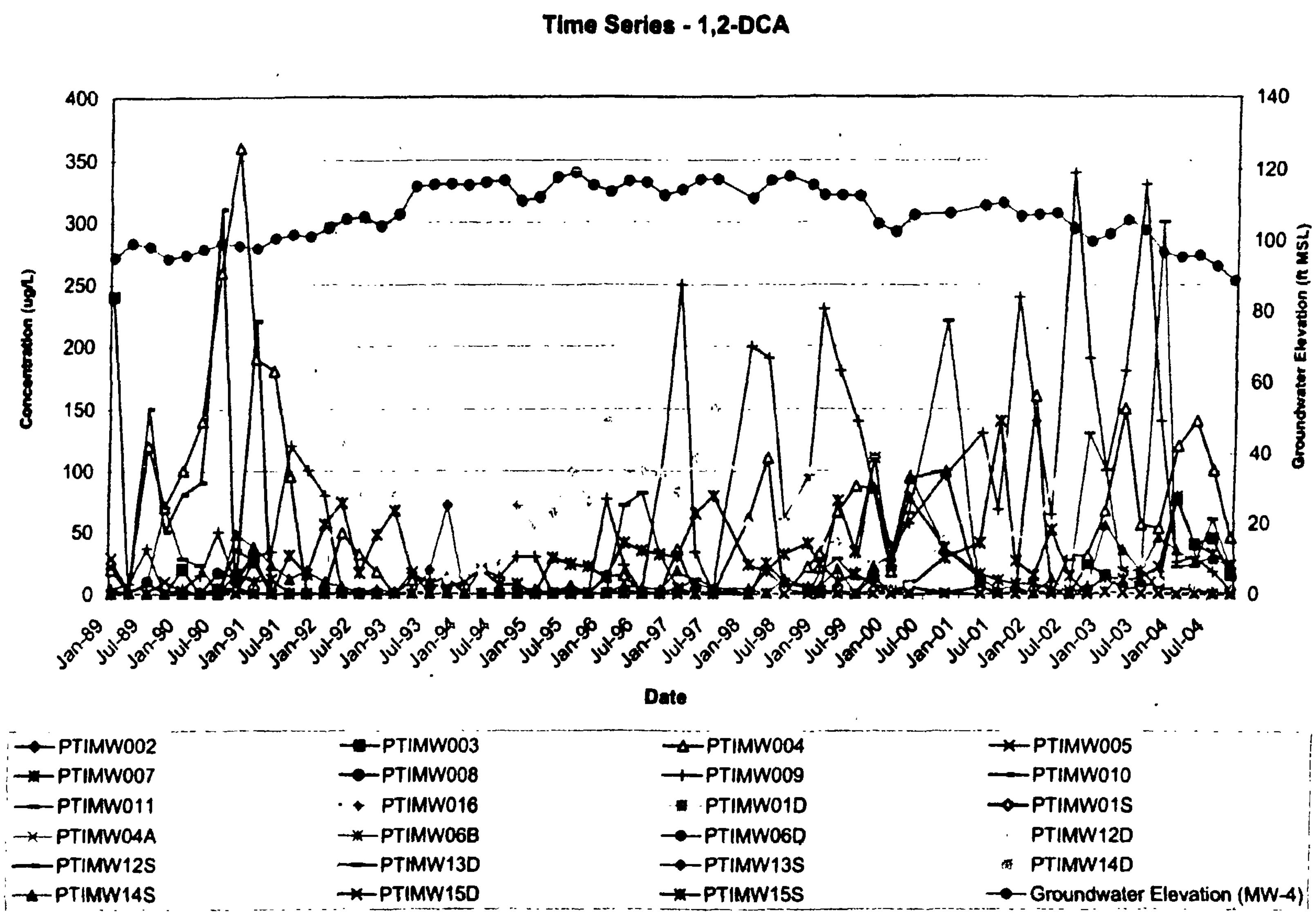


CDM

Time Series - 1,1-DCA

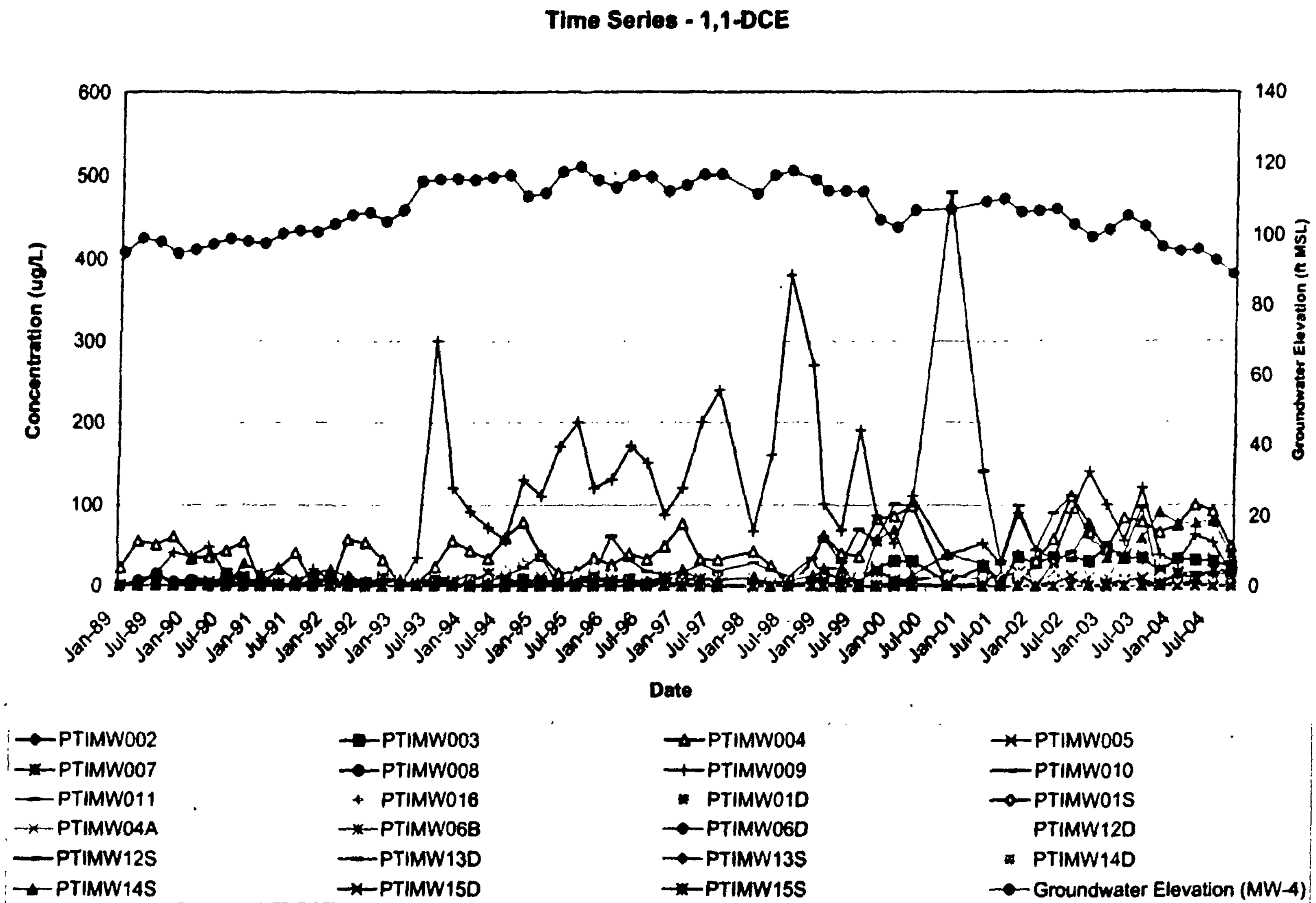


CDM



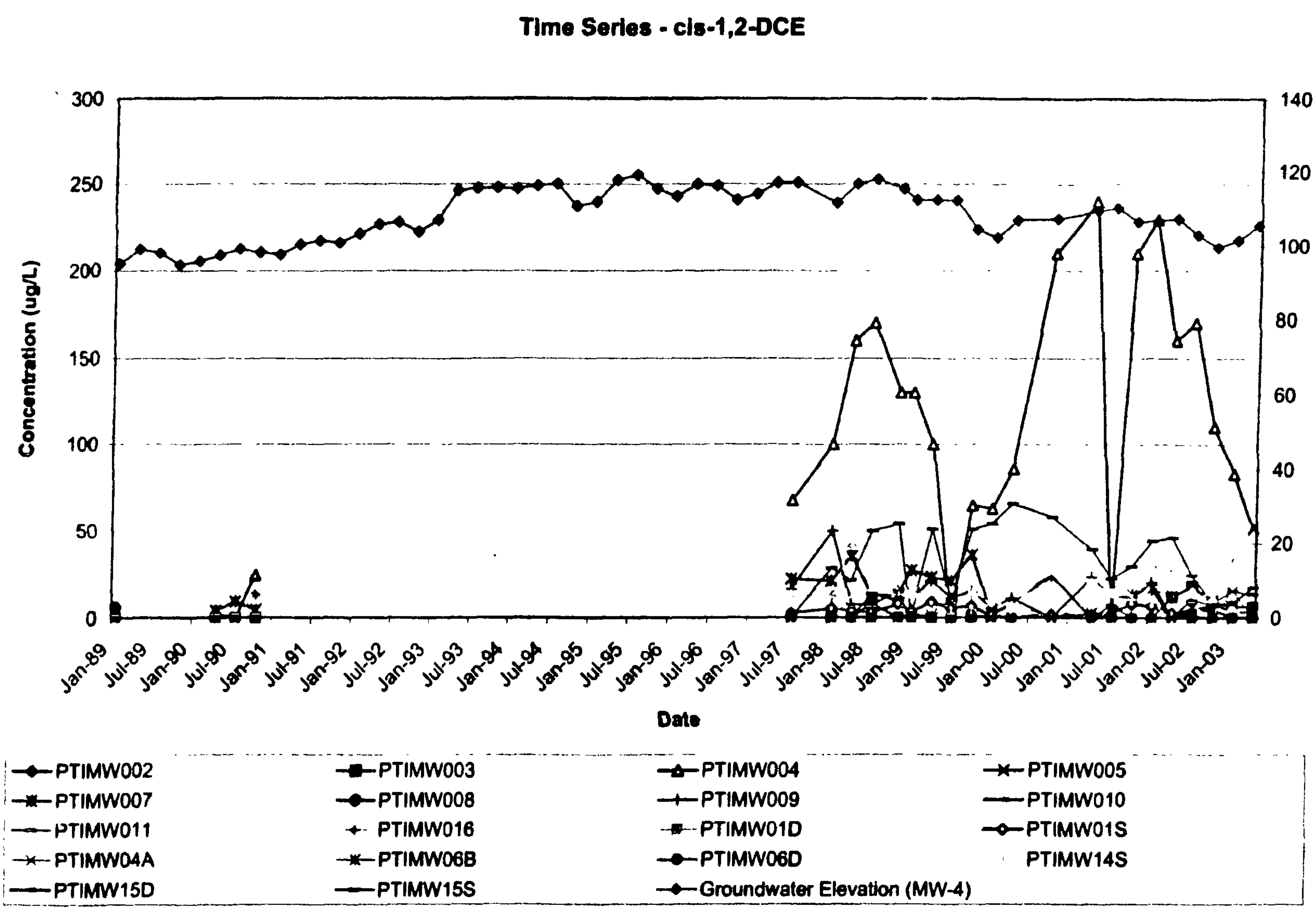
Time Series - 1,2-DCA
Concentration (ug/L)
Groundwater Elevation (ft MSL)
400
350
300
250
200
150
100
50
0
140
120
100
80
60
40
20
0
Jan-89 Jul-89 Jan-90 Jul-90 Jan-91 Jul-91 Jan-92 Jul-92 Jan-93 Jul-93 Jan-94 Jul-94 Jan-95 Jul-95 Jan-96 Jul-96 Jan-97 Jul-97 Jan-98 Jul-98 Jan-99 Jul-99 Jan-00 Jul-00 Jan-01 Jul-01 Jan-02 Jul-02 Jan-03 Jul-03 Jan-04 Jul-04
Date
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

CDM



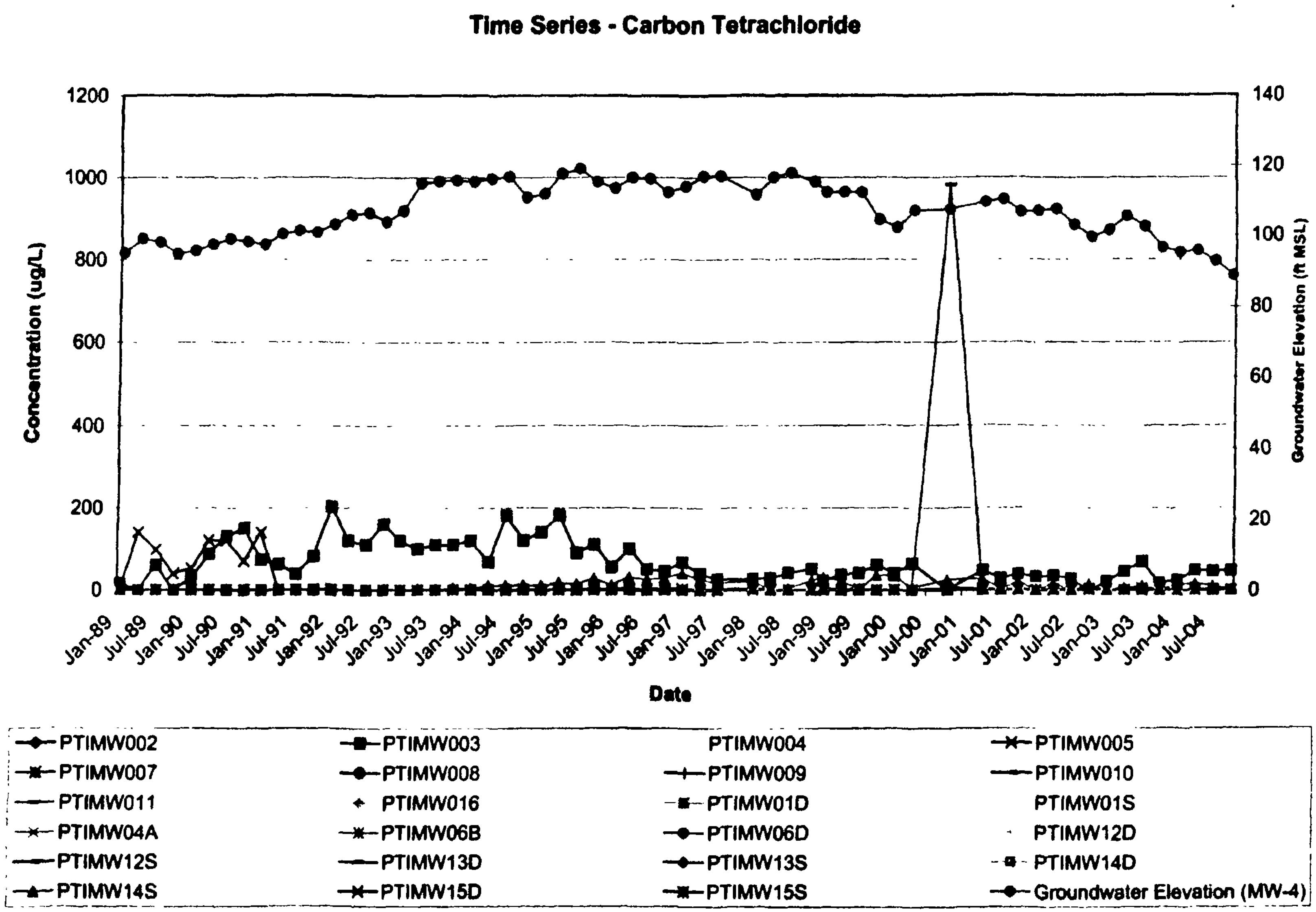
Time Series - 1,1-DCE
Concentration (ug/L)
Groundwater Elevation (ft MSL)
Date
0
100
200
300
400
500
600
0
20
40
60
80
100
120
140
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

CDM



Time Series - cis-1,2-DCE
Concentration (ug/L)
300
250
200
150
100
50
0
140
120
100
80
60
40
20
0
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Date
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

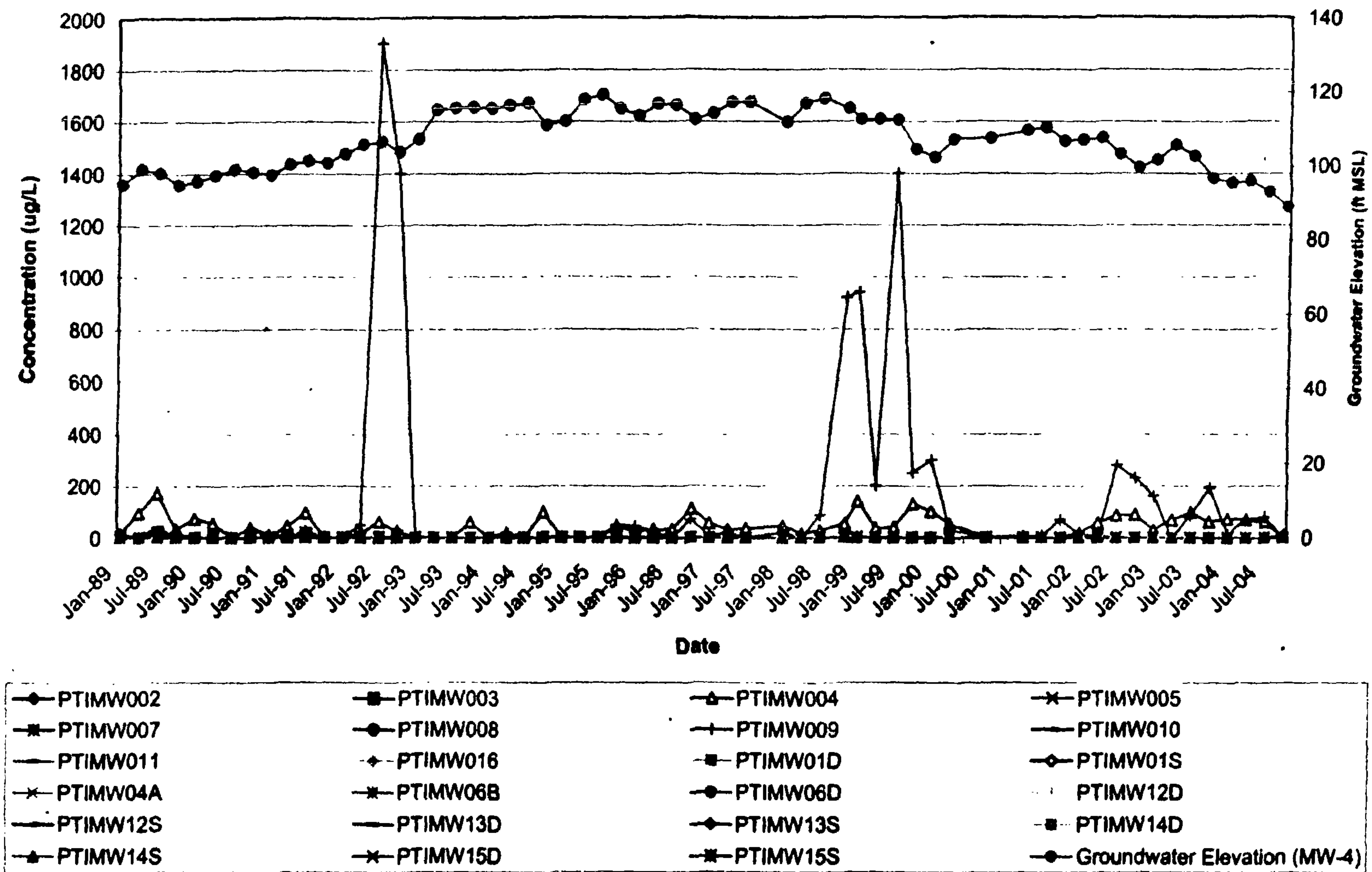
CDM



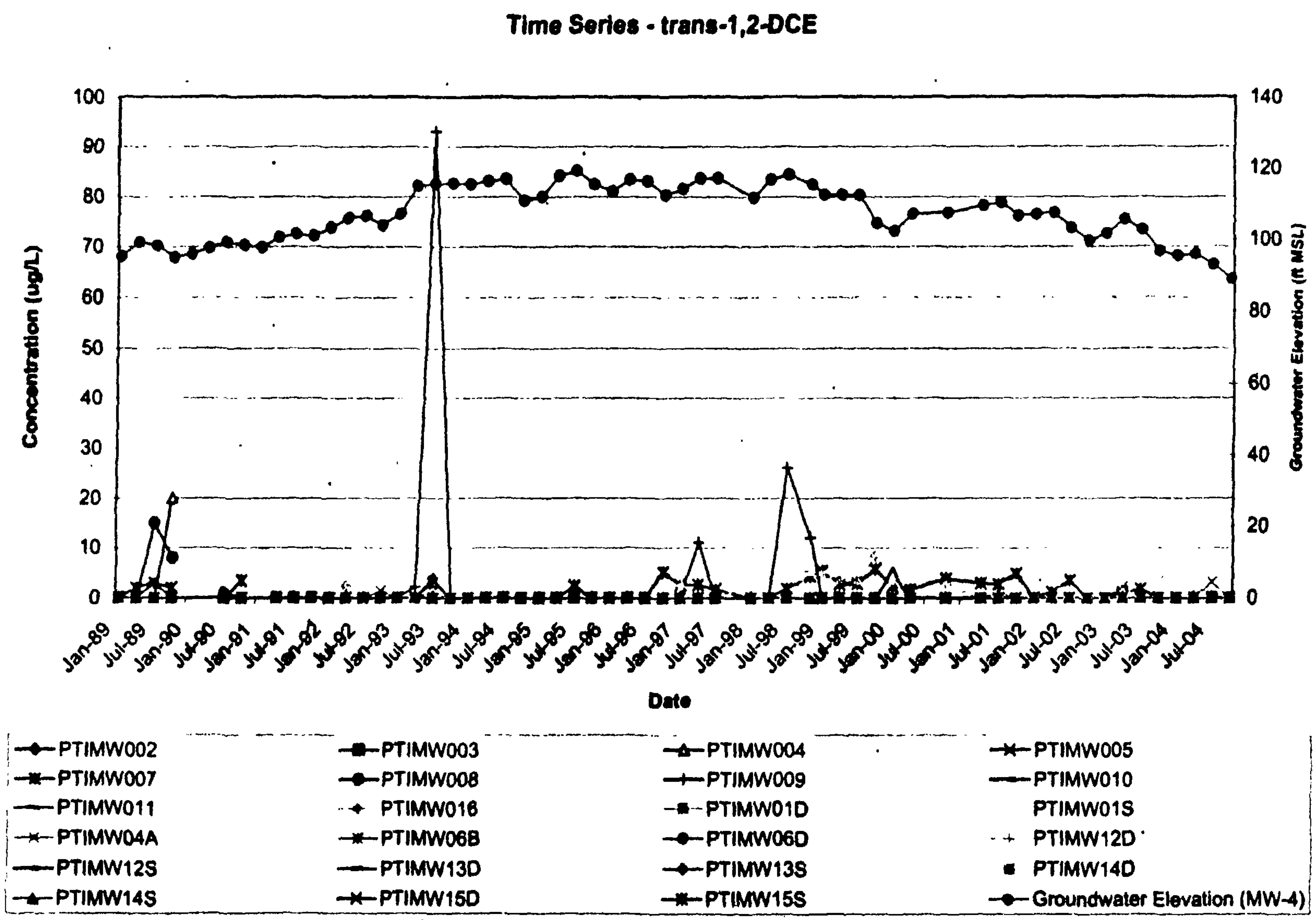
Time Series - Carbon Tetrachloride
Concentration (ug/L)
Groundwater Elevation (ft MSL)
Date
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

CDM

Time Series - Methylene Chloride

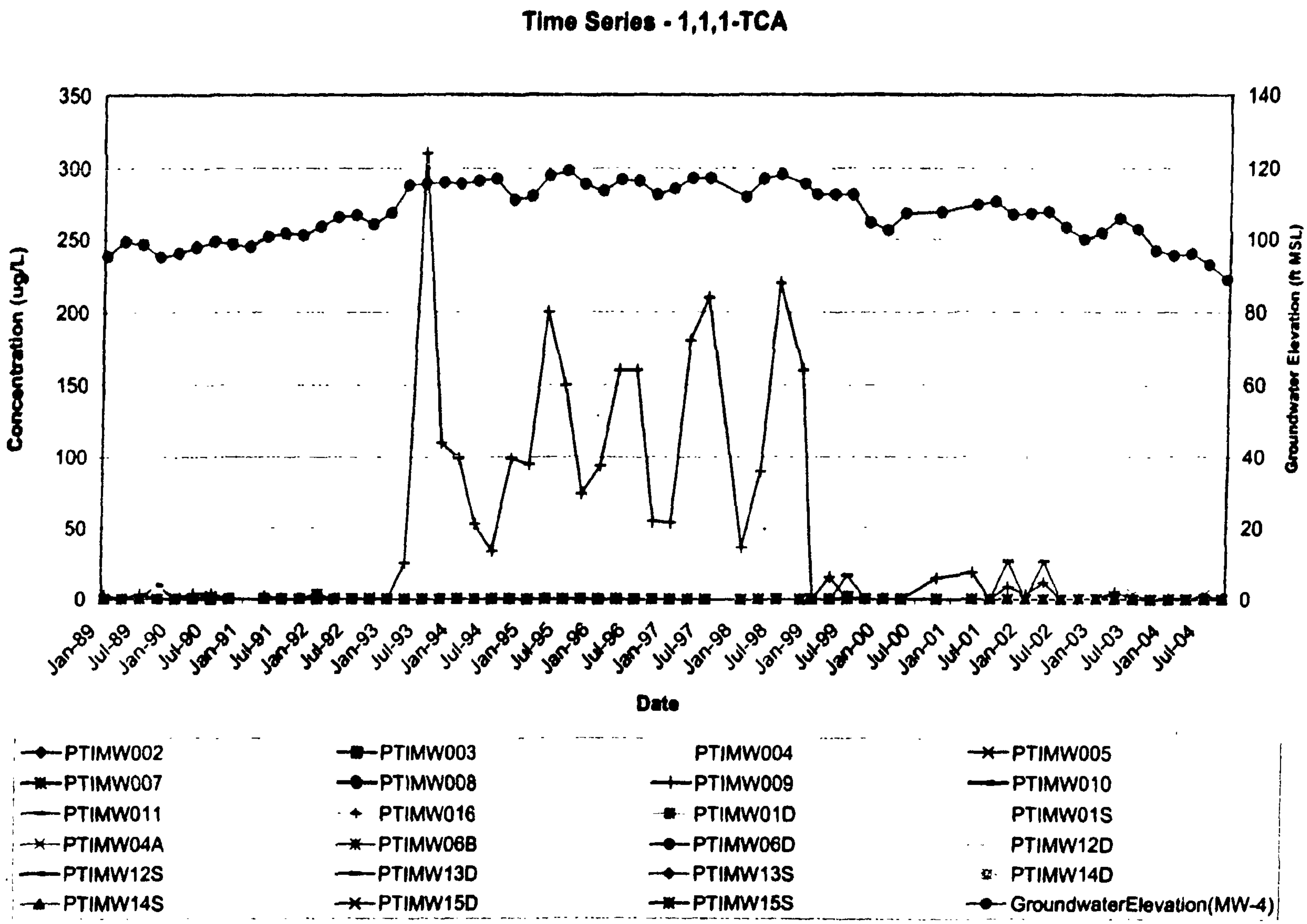


CDM



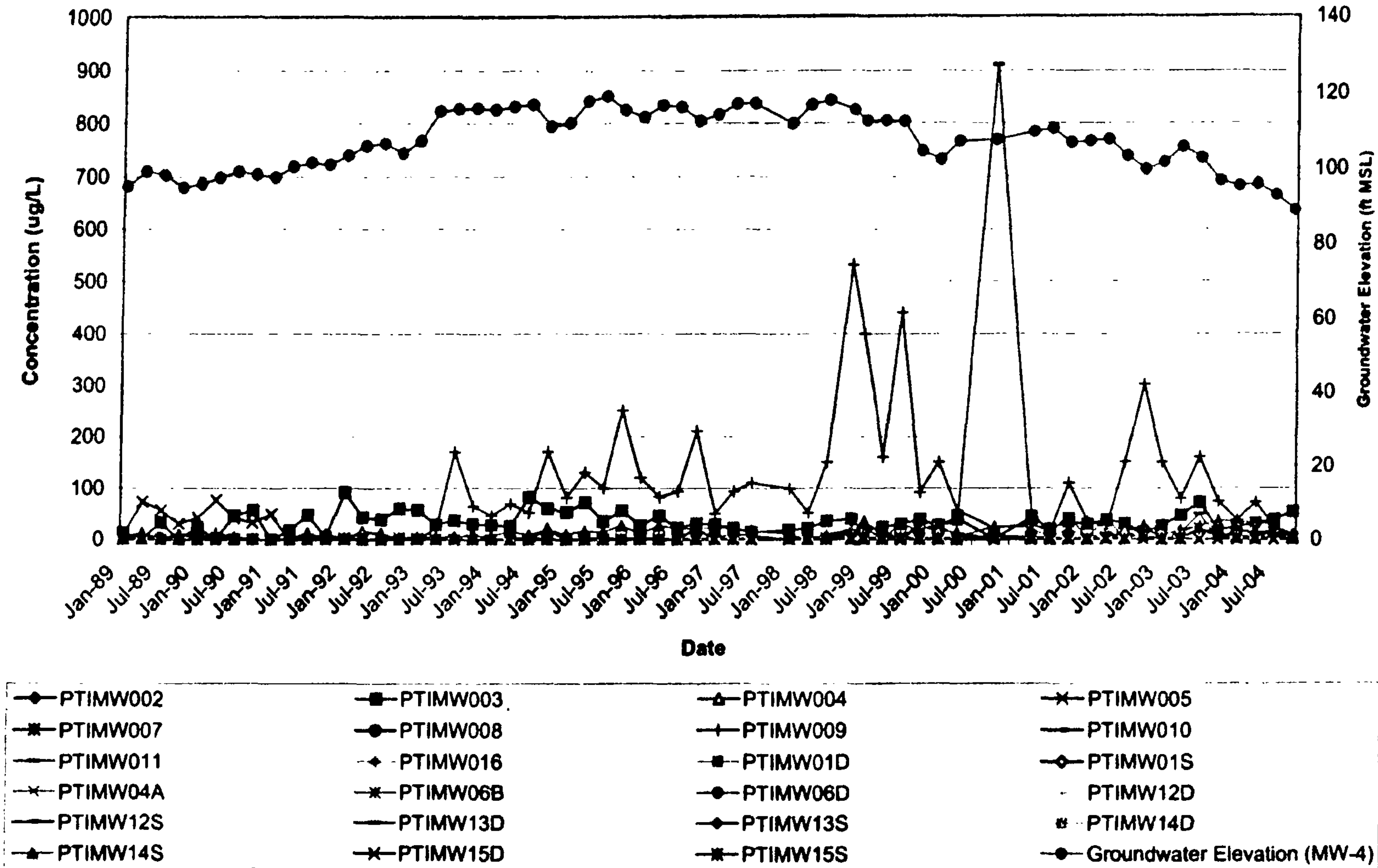
Time Series - trans-1,2-DCE
Concentration (ug/L)
Groundwater Elevation (ft MSL)
Date
0
10
20
30
40
50
60
70
80
90
100
0
20
40
60
80
100
120
140
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

CDM

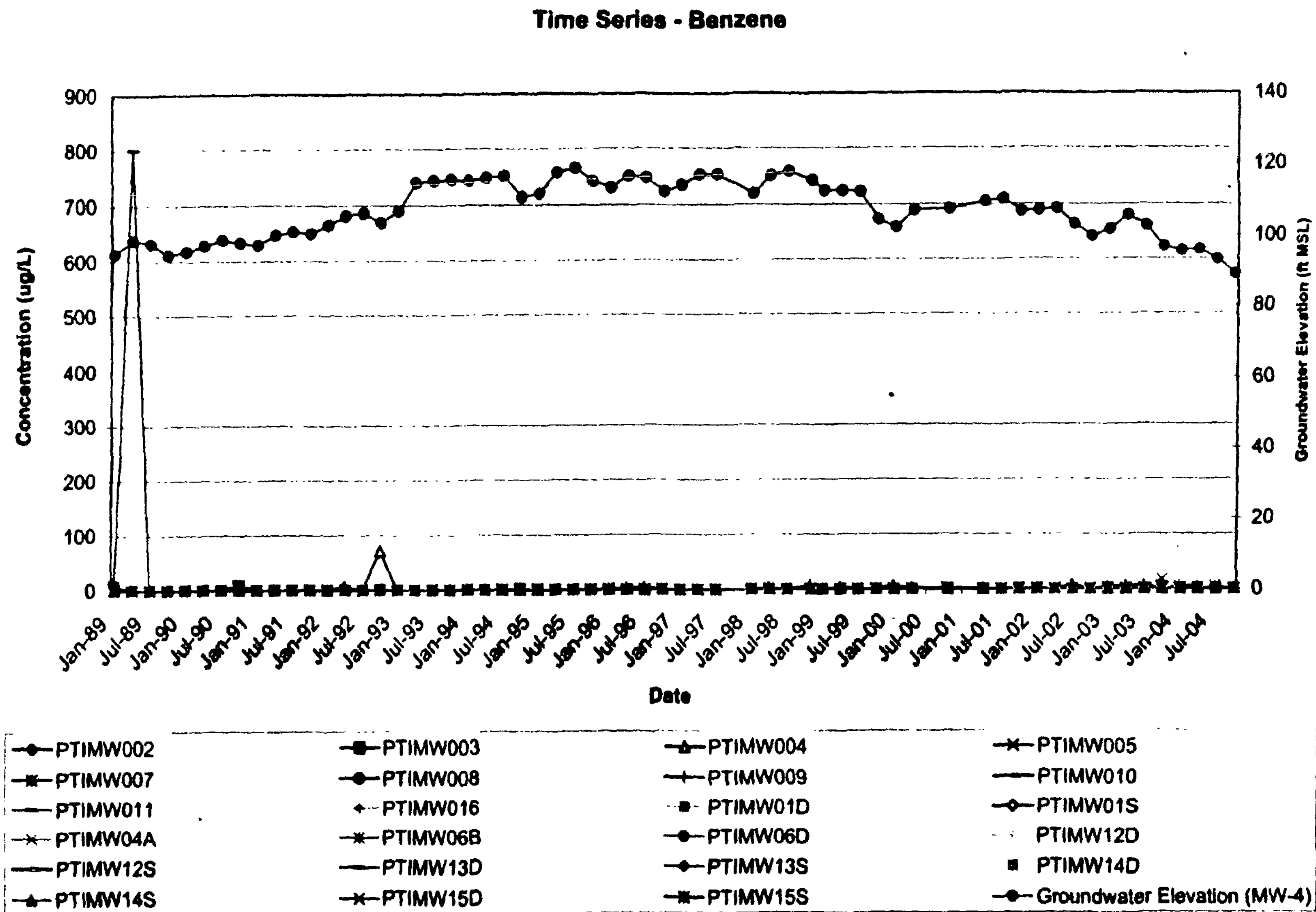

Time Series - 1,1,1-TCA
Concentration (ug/L)
Groundwater Elevation (ft MSL)
350
300
250
200
150
100
50
0
140
120
100
80
60
40
20
0
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Date
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
GroundwaterElevation(MW-4)

CDM

Time Series - Chloroform

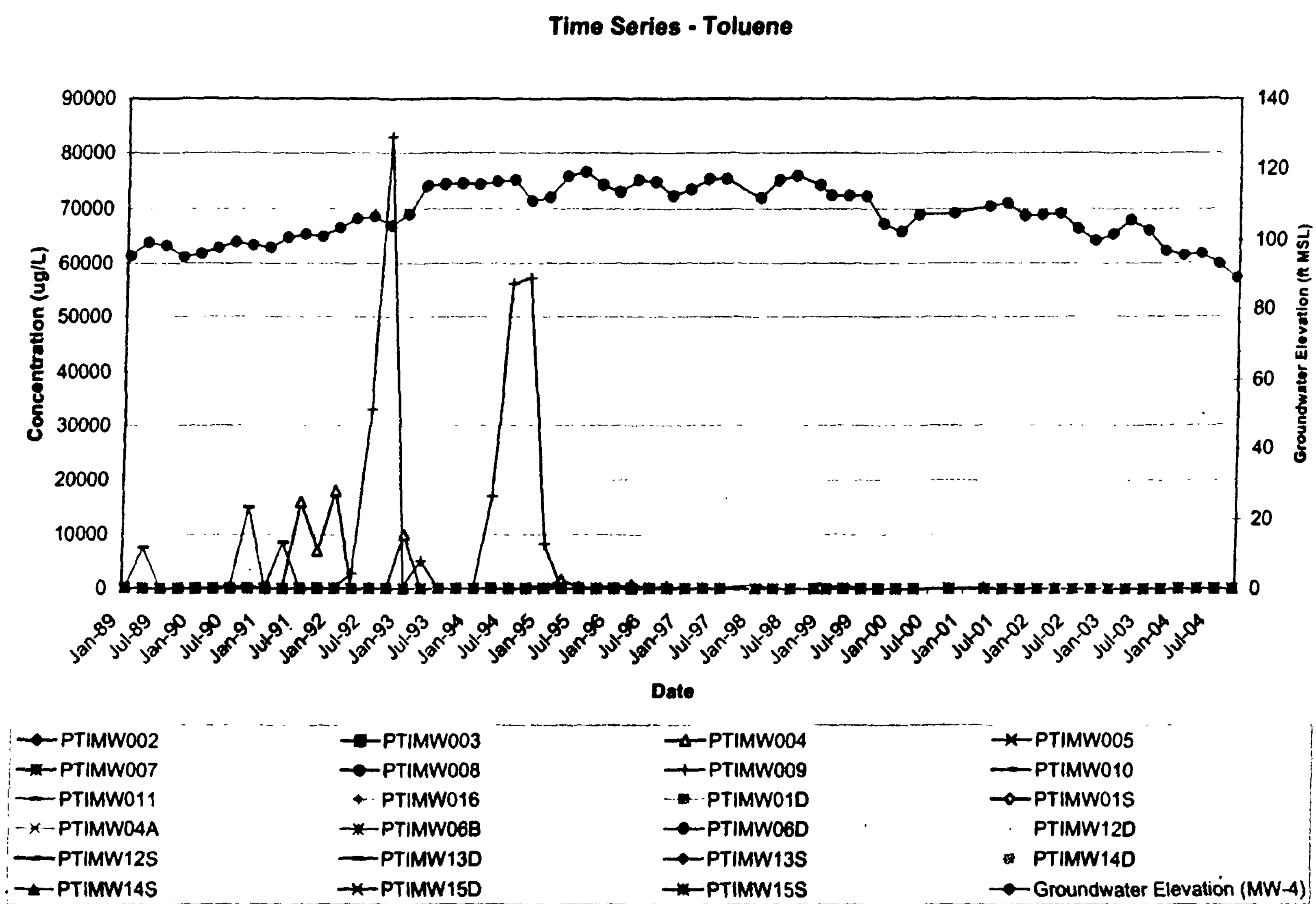


CDM

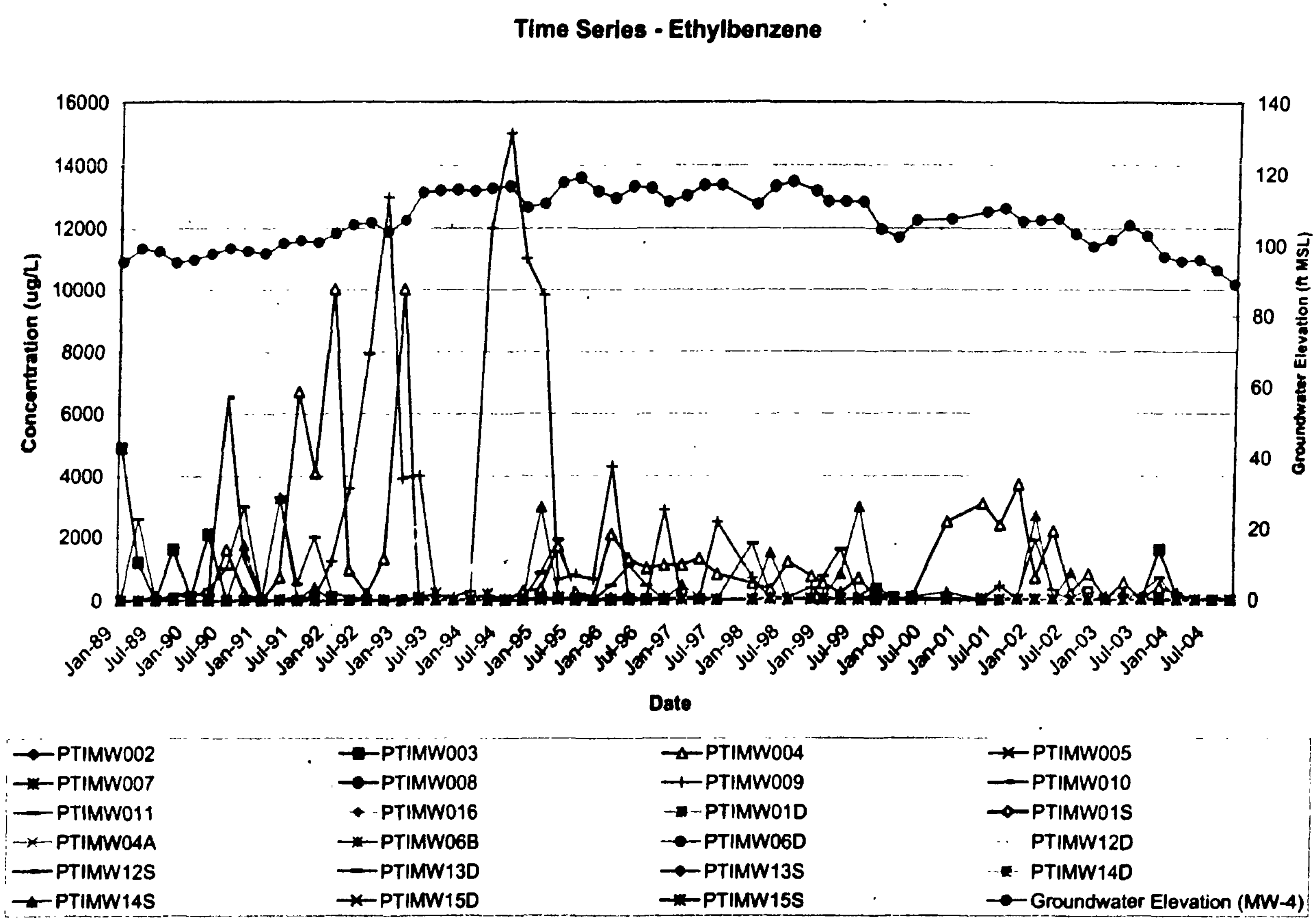


Time Series - Benzene
900
800
700
600
500
400
300
200
100
0
Concentration (ug/L)
140
120
100
80
60
40
20
0
Groundwater Elevation (ft MSL)
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Date
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

CDM

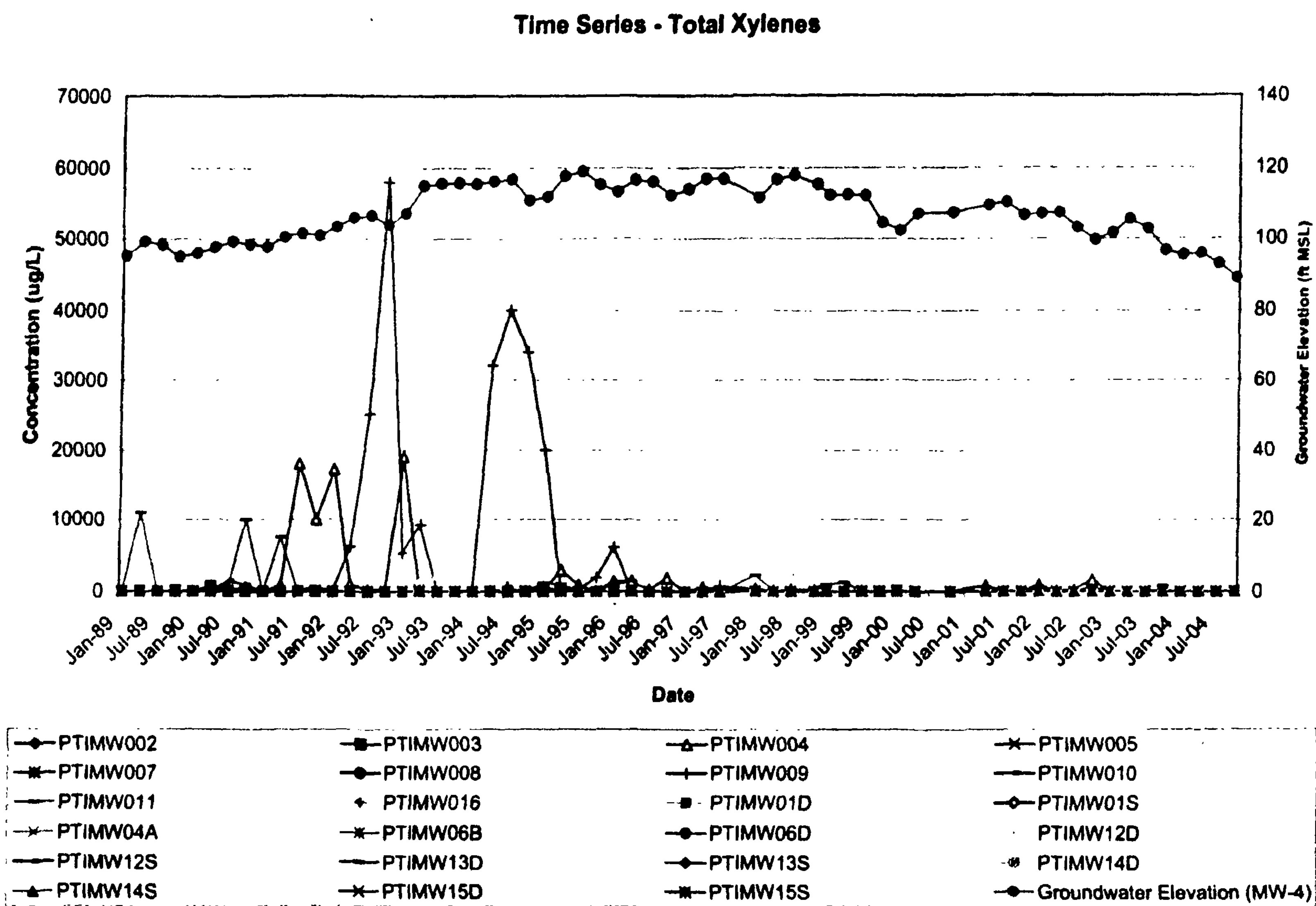

Time Series - Toluene
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
Concentration (ug/L)
140
120
100
80
60
40
20
0
Groundwater Elevation (ft MSL)
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Date
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

CDM



Time Series - Ethylbenzene
Concentration (ug/L)
Groundwater Elevation (ft MSL)
Date
0
2000
4000
6000
8000
10000
12000
14000
16000
20
40
60
80
100
120
140
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

CDM



Time Series - Total Xylenes
Concentration (ug/L)
70000
60000
50000
40000
30000
20000
10000
0
Groundwater Elevation (ft MSL)
140
120
100
80
60
40
20
0
Jan-89
Jul-89
Jan-90
Jul-90
Jan-91
Jul-91
Jan-92
Jul-92
Jan-93
Jul-93
Jan-94
Jul-94
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Date
PTIMW002
PTIMW003
PTIMW004
PTIMW005
PTIMW007
PTIMW008
PTIMW009
PTIMW010
PTIMW011
PTIMW016
PTIMW01D
PTIMW01S
PTIMW04A
PTIMW06B
PTIMW06D
PTIMW12D
PTIMW12S
PTIMW13D
PTIMW13S
PTIMW14D
PTIMW14S
PTIMW15D
PTIMW15S
Groundwater Elevation (MW-4)

CDM

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated																Chlorinated											
MW-01D	10/15/90		0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	5 U	5 U			5 U	5 U	5 U	5 U	5 U		5 U	5 U	5 U	6.3	5 U	5 U		26	5 U	5 U
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U					1 U	1 U			1 U		1 U		1 U	1 U				1 U		
	04/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		28	1 U	1 U	3.6	1 U	1 U		40	1 U	1 U
	07/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		21	1 U	1 U	1 U	1 U	1 U		14	1 U	1 U
	10/23/91		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	1 U	2 U	0.2 U	0.2 U	0.54	0.2 U	0.2 U		10	2 U	0.2 U
	01/15/92		1 U	1 U	1 U	3		1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	2	1 U		3.6	1 U	1 U
	04/15/92		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8	0.5 U	0.5 U
	07/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.2	1 U	1 U
	10/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.2	1 U	1 U
	01/15/93		0.5 U	7.4	11	25		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.5	1 U	1 U
	04/19/93		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		15 B	1 U	1 U	1 U	1 U	1 U		1.5	1 U	1 U
	07/12/93		0.5 U	3.5	3	7.1		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		10 B	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U
	10/12/93		0.5 U	1 U	2.1	4.1		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U
	01/10/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.4	1 U	1 U
	04/11/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.6	1 U	1 U
	07/18/94		0.5 U	1.5	1 U	3.7		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.3	1 U	1 U
	10/10/94		0.5 U	1 U	1 U	5.8		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.5	1 U	1 U
	01/17/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3.5	1 U	1 U		1 U	1 U	1 U
	04/17/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		8.1 B	1 U	1 U	3.6	1 U	1 U		1.3	1 U	1 U
	07/10/95		0.5 U	2.4	6	9.4		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	4.7	1 U	1 U		1.2	1 U	1 U
	10/09/95		0.5 U	1 U	1 U	2		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.9	1 U	1 U		1.4	1 U	1 U
	01/30/96		0.5 U	1 U	1 U	1.8		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.4	1 U	1 U		1.2	1 U	1 U
	04/15/96		0.5 U	1 U	4.1	5.7		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.4	1 U	1 U
	07/15/96		0.5 U	1 U	3.5	5.5		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.4	1 U	1 U
	10/07/96		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.5	1 U	1 U
	01/13/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.6	1 U	1 U
	04/15/97		0.5 U	2.3	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	4.4	1 U	1 U		2.7	1 U	1 U
	07/08/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3.9	1 U	1 U		2.1	1 U	1 U
	10/14/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2	1 U	1 U		3.2	1 U	1 U
	01/13/98		0.5 U	1 U	1.1	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		3	1 U	1 U
	04/21/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.2	1 U	1 U
	07/15/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.9	1 U	1 U
	10/20/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		2.4	1 U	1 U
	01/15/99		0.5 U	1 U	1	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2	1 U	1 U
	04/15/99		1 U	1 U	1.6	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.1	2 U	2 U
	07/15/99		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	24	1 U	1 U		2.7	2 U	2 U
	10/15/99		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	4.9	1 U	1 U		2	2 U	2 U
	01/25/00		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	21	1 U	1 U		7.1	2 U	2 U
	04/15/00		1 U	1.7	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	8	1 U	1 U		3.3	2 U	2 U
	10/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	7.8	1 U	1 U		3.1	2 U	2 U
	04/15/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	5.8	1 U	1 U		2.7	2 U	2 U
	07/17/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.1	2 U	2 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Non-chlorinated: Benzene, Toluene, Ethylbenzene, Xylenes, Total, Isopropylbenzene. Chlorinated: Chlorobenzene through Vinyl chloride.

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE
MW-01D	10/16/01		1.5	1 U	1 U	15		1 U	1 U	1 U	2 U	2 U	1 U	
	01/15/02		1.8	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	
	04/18/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U	
	07/24/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U	
	10/22/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U	
	01/08/03		0.67	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U
	04/23/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U
	07/30/03		[illegible]	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U
	10/21/03		1.2	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U
	01/21/04		4	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U
	04/20/04		0.58	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U
	07/20/04		[illegible]	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	11	1 U
	10/11/04		1.1	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U
MW-01B	01/15/89		0.1 U	0.1 U	0.1 U	0.2 U		0.1 U	0.1 U	0.2	0.1 U	0.2 U		
	04/15/89		0.7 U	1 U	1 U	3		1 U	1 U	1 U	1 U	1 U		
	07/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	10/15/89		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	01/22/90		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.2 U	0.2 U	0.2 U		
	04/10/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	1 U	1 U	1 U		
	07/15/90		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.3	0.2 U	0.2 U	0.73	
	10/15/90		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U				
	04/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	07/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	10/21/91		1 U	1 U	1 U	2 U		1 U	0.4 U	0.4 U	0.4 U	0.4 U	1.8	
	01/15/92		1 U	1.5	1.2	4.3		1 U	1 U	1 U	1 U	1 U	1 U	
	04/15/92		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.87	0.5 U
	07/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	10/15/92		0.96	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	01/15/93		0.5 U	2.2	1.3	5.6		1 U	1 U	1 U	1 U	1 U		
	04/19/93		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	07/12/93		0.5 U	17	17	4		1 U	1 U	1 U	1 U	1 U		
	10/12/93		0.5 U	1 U	2.2	4.3		1 U	1 U	1 U	1 U	1 U		
	01/10/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	04/11/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	07/18/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	10/18/94		0.5 U	1 U	1 U	5.3		1 U	1 U	1 U	1 U	1 U		
	01/16/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	04/17/95		0.5 U	1 U	1.3	1 U		1 U	1 U	1 U	1 U	1 U		
	07/10/95		0.5 U	1.2	3.5	6.1		1 U	1 U	1 U	1 U	1 U		
	10/09/95		0.5 U	1 U	17	3.9		1 U	1 U	1 U	1 U	1 U		
	01/30/96		0.5 U	1 U	17	6.1		1 U	1 U	1 U	1 U	1 U		

Well Number	Sample Date	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-01D	10/16/01	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3.3	1 U	1 U		3.5	2 U	2 U
	01/15/02	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.5	1 U	1 U		1.9	2 U	2 U
	04/18/02	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3.9	1 U	1 U		3.3	2 U	2 U
	07/24/02	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	17	1 U	1 U		2.8	2 U	2 U
	10/22/02	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.6	1 U	1 U		1.8	2 U	2 U
	01/08/03	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	2.8	1 U	1 U	1 U	2.2	1 U	0.5 U
	04/23/03	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.8	1 U	1 U	1 U	1.8	1 U	0.5 U
	07/30/03	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.6	1 U	1 U	1 U	1.8	1 U	0.5 U
	10/21/03	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.4	1 U	1 U	1 U	2.4	1 U	0.5 U
	01/21/04	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	5.7	1 U	1 U	1 U	[illegible]	1 U	0.5 U
	04/20/04	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	3	1 U	1 U	1 U	6.9	1 U	0.5 U
	07/20/04	1 U	0.5 U	1 U	1 U	3	5 U	5 U	1 U	1 U	23	1 U	1 U	1 U	[illegible]	12	0.5 U
	10/11/04	1 U	0.5 U	1 U	1 U	2.8	5 U	5 U	1 U	1 U	8.6	1 U	1 U	1 U	34	5.7	0.5 U
MW-01B	01/15/89	0.1 U	0.7	0.1 U	0.1 U	0.1 U	0.2 U	1 U	0.1 U	0.2 U	2.8	0.1 U	0.1 U		[illegible]	0.5 U	0.1 U
	04/15/89	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4	1 U	1 U		23	1 U	1 U
	07/15/89	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1	1 U	1 U		13	1 U	1 U
	10/15/89	1 U	1 U	1 U	1 U	1 U		1 U	1 U		3	1 U	1 U		12	1 U	1 U
	01/22/90	0.2 U	0.3	0.5 U	0.5 U	0.73	0.2 U	2 U		0.2 U	2.1	0.2 U	0.2 U		[illegible]	2 U	0.2 U
	04/10/90	1 U	1 U	2.5 U	2.5 U	1 U	1 U	10 U		1 U	3.8	1 U	1 U		20	10 U	1 U
	07/15/90	0.2 U	1.1	0.5 U	0.5 U	0.8	0.2 U	2 U	0.2 U	0.2 U	4	0.2 U	0.2 U		16	2 U	0.2 U
	10/15/90	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	5	1 U	1 U		[illegible]	1 U	1 U
	01/15/91	1 U	1			1 U		1 U		1 U	6.9				28		
	04/15/91	1 U	1 U	1 U	1 U	1 U		1.6 B	1 U	1 U	3.6	1 U	1 U		22	1 U	1 U
	07/15/91	1 U	1 U	1 U	1 U	1 U		14	1 U	1 U	3.6	1 U	1 U		17	1 U	1 U
	10/21/91	0.4 U	0.7	1 U	1 U	0.4 U	2 U	4 U	0.4 U	0.4 U	1.9	0.4 U	0.4 U		14	4 U	0.4 U
	01/15/92	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		13	1 U	1 U
	04/15/92	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8	0.5 U	0.5 U	0.5 U	8.9	0.5 U	0.5 U
	07/15/92	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.6	1 U	1 U		[illegible]	1 U	1 U
	10/15/92	1 U	1 U	1 U	1 U	1 U		1	1 U	1 U	1 U	1 U	1 U		11	1 U	1 U
	01/15/93	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	11		9.2	1 U	1 U
	04/19/93	1 U	1.4	1 U	1 U	1 U		1.2 B	1 U	1.8	1 U	1 U	1 U		5.7	1 U	1 U
	07/12/93	1 U	1 U	1 U	1 U	1 U		1.8 B	1 U	1 U	1 U	1 U	1 U		11	1 U	1 U
	10/12/93	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		14	1 U	1 U
	01/10/94	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		9.3	1 U	1 U
	04/11/94	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		14	1 U	1 U
	07/18/94	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		7.9	1 U	1 U
	10/18/94	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		13	1 U	1 U
	01/16/95	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5.2	1 U	1 U
	04/17/95	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.5	1 U	1 U		4.4	1 U	1 U
	07/10/95	1 U	1.3	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		6.2	1 U	1 U
	10/09/95	1.4	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		15	1 U	1 U
	01/30/96	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		8.4	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethylbenzene (Non-chlorinated)	Xylenes, Total (Non-chlorinated)	Isopropylbenzene (Non-chlorinated)	Chlorobenzene	CCl4	CFM	Chloroethane	Chloromethane	cis-1,2-DCE	1,2-DBE	1,1-DCA (Chlorinated)	1,2-DCA (Chlorinated)	1,2-DCB (Chlorinated)	1,3-DCB (Chlorinated)	1,1-DCE (Chlorinated)	DCFM (Chlorinated)	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-01S	04/15/96		0.5 U	1 U	3.4	4.8		1 U	1 U	1 U	1 U	1 U			1 U	1.2	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.9	1 U	1 U
	07/15/96		0.5 U	1 U	2.2	3.7		1 U	1 U	1 U	1 U	1 U			1 U	1.1	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		9.7	1 U	1 U
	10/07/96		0.5 U	1 U	2.1	2.8		1 U	1 U	1 U	1 U	1 U			1.8	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		16	1 U	1 U
	01/13/97		0.5 U	1 U	1 U	2		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		8	1 U	1 U
	04/15/97		0.5 U	1 U	1.4	1.2		1 U	1 U	1 U	1 U	1 U			1.4	1.1	1 U	1 U	1 U		1 U	1 U	1 U	5.4	1 U	1 U		15	1 U	1 U
	07/08/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1.4	1.1	1 U	1 U	1 U		1 U	1 U	1 U	3.6	1 U	1 U		14	1 U	1 U
	10/14/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1.5	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		12	1 U	1 U
	01/13/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		12	1 U	1 U
	04/21/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1.8	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		14	1 U	1 U
	07/14/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1.7	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		14	1 U	1 U
	10/19/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1	1.2	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		7.9	1 U	1 U
	01/15/99		0.5 U	1 U	2	1 U		1 U	1 U	1 U	1 U	1 U			1.2	1.6	1 U	1 U	1 U		1 U	1 U	1 U	1.9	1 U	1 U		10	1 U	1 U
	04/15/99		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	2.6		1 U	1.6	1 U	1 U	1		1 U	1 U	1 U	1.8	1 U	1 U		7.2	2 U	2 U
	07/15/99		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	5.3		1.8	1 U	1 U	1 U	1		1 U	1 U	1 U	16	1 U	1 U		6.1	2 U	2 U
	10/15/99		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	3.8		1.1	1.5	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		9.1	2 U	2 U
	01/25/00		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	2.8		1.8	1.5	1 U	1 U	1 U		1 U	1 U	1 U	31	1 U	1 U		9.9	2 U	2 U
	04/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	7.8		2.6	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		16	2 U	2 U
	10/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	3.6		1.3	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		8.8	2 U	2 U
	04/15/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	8.8		1.8	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		13	2 U	2 U
	07/17/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	5.6		1.5	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		10	2 U	2 U
	10/16/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	6.7		1.8	1.1	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		13	2 U	2 U
	01/15/02		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1.2		1 U	1.3	1 U	1 U	1 U		1 U	1 U	1 U	1.6	1 U	1 U		7	2 U	2 U
	04/18/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1.2	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		5.3	2 U	2 U
	07/24/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1.8		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		6.2	2 U	2 U
	10/22/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	2.2		1 U	1.1	1 U	1 U	1 U		1 U	1 U	1 U	1.4	1 U	1 U		8.3	2 U	2 U
	01/08/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2.5	1 U	1 U	1.3	1 U	1 U	1 U	5 U	5 U	1 U	1 U	2	1 U	1 U	1 U	11	1 U	0.5 U
	04/23/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	6	1 U	1.8	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	11	1 U	0.5 U
	07/28/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	8.5	1 U	1.8	0.67	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	13	1 U	0.5 U
	10/21/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2.8	1 U	1 U	1.1	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.5	1 U	1 U	1 U	12	1 U	0.5 U
	01/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1.4	1 U	1.4	0.88	1 U	1 U	1 U	5 U	5 U	1 U	1 U	8.2	1 U	1 U	1 U	18	1 U	0.5 U
	04/20/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.3	0.67	1 U	1 U	1	5 U	5 U	1 U	1 U	7.3	1 U	1 U	1 U	13	1 U	0.5 U
	07/20/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	2.1	0.74	1 U	1 U	1.5	5 U	5 U	1 U	1 U	9.5	1 U	1 U	1 U	14	1 U	0.5 U
MW-02	01/15/89		0.5 U	0.5 U	0.5 U	1 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.8	0.2 U	0.2 U		60	0.2 U	0.2 U
	01/15/89	K	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	0.5 U	0.5 U		82	0.5 U	0.5 U
	04/15/89		1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		45	1 U	1
	07/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1	1 U	1 U		67	1 U	1
	10/15/89		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U		2	1 U	1 U		36	1 U	1
	01/23/90		1 U	1 U	1 U	2 U		1 U	0.4 U	0.4 U	0.4 U	0.4 U			0.4 U	0.4 U	1 U	1 U	0.4 U	0.4 U	4 U		0.4 U	0.54	0.4 U	0.4 U		27	4 U	0.4
	04/10/90		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.2 U	0.2 U	0.2 U			0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U		0.2 U	0.2 U	0.2 U	0.2 U		26	2 U	0.2
	07/16/90		1 U	1 U	1 U	2 U		1 U	0.4 U	0.86	0.4 U	0.4 U	0.4 U		18	4.3	1 U	1 U	0.72	0.4 U	4 U	0.4 U	0.4 U	1	0.4 U	0.4 U		30	4 U	0.4
	10/15/90		0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	5 U	5 U			5 U	5 U	5 U	5 U	5 U		5 U	5 U	5 U	5 U	5 U	5 U		24	5 U	5
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U					1 U	1 U			1 U		1 U		1 U	1 U				15		

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

			Non-chlorinated					Chlorinated																						
Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-03	01/15/89		7.4	17	4800			0.2 U	16	13	0.2 U	0.2 U			4.4	240	0.2 U	0.2 U	0.2 U	0.2 U	3.2	0.2 U	0.2 U	4.8	0.2 U	0.2 U		74	0.2 U	0.2 U
	01/15/89	K	50 U	50	3700	1100		50 U	50 U	50 U	50 U	50 U			50 U	210	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U		110	50 U	50 U
	04/15/89		50 U	50 U	1200	60		50 U	50 U	50 U	50 U	50 U			50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U		120	50 U	50 U
	04/15/89	K	5 U	5 U	670	71		5 U	47	35	5 U	5 U		5 U	11	38	5 U	5 U	23	5 U	5 U	5 U	5 U	5 U	5 U	5 U		110	5 U	5 U
	07/15/89		7 U	10 U	10 U	10 U		10 U	60	33	10 U	10 U			10 U	10 U	10 U	10 U	10 U		20	10 U	10 U	10 U	10 U	10 U		120	10 U	10 U
	10/15/89		50 U	100 U	1800	150		100 U	100 U	100 U	100 U	100 U			100 U	100 U	100 U	100 U	100 U		100 U	100 U	100 U	100 U	100 U	100 U		100 U	100 U	100 U
	10/15/89	K	50 U	100 U	1700	180		100 U	100 U	100 U	100 U	100 U			100 U	100 U	100 U	100 U	100 U		100 U	100 U	100 U	100 U	100 U	100 U		100 U	100 U	100 U
	01/22/90		5 U	5 U	110	10 U		2 U	28	23	5 U	2 U			2 U	20	5 U	5 U	4	2 U	20 U		2 U	5 U	2 U	2 U		66	20 U	2 U
	01/22/90	K	5 U	0.17 U	140	10 U		2 U	34	25	5 U	2 U			2 U	21	5 U	5 U	4.9	2 U	20 U		2 U	5 U	2 U	2 U		74	20 U	2 U
	04/11/90		50 U	50 U	2100	720		50 U	87	20 U	20 U	20 U			20 U	20 U	50 U	50 U	20 U	20 U	200 U		20 U	20 U	20 U	20 U		74	200 U	20 U
	07/13/90		5 U	5 U	5 U	10 U		5 U	130	46	2 U	2 U	2 U		8.5	3.7	5 U	5 U	14	2 U	20 U	2 U	2 U	2 U	2 U	2 U		130	20 U	2 U
	10/16/90		8	2	1 U	1 U		10 U	150	58	10 U	10 U			10 U	10 U	10 U	10 U	10		10 U	10 U	10 U	10 U	10 U	10 U		130	10 U	10 U
	01/15/91		0.5 U	1 U	1 U	1 U			74	1 U					1 U	28			1 U		1 U		1 U	1 U				38		
	04/15/91		0.5 U	1 U	1 U	1 U		2 U	83	17	2 U	2 U			1 U	1 U	2 U	2 U	1 U		8.5	2 U	2 U	1 U	1 U	2 U		27	2 U	2 U
	07/15/91		0.5 U	1 U	1 U	1 U		2 U	38	47	2 U	2 U			2 U	2 U	2 U	2 U	2 U		6	2 U	2 U	2 U	2 U	2 U		28	2 U	2 U
	10/23/91		5 U	5 U	5 U	10 U		5 U	82	8.2	2 U	2 U	2 U		5.3	2 U	5 U	5 U	6.7	10 U	20 U	2 U	2 U	2 U	2 U	2 U		71	20 U	2 U
	01/16/92		1 U	1 U	1 U	4		1 U	202	91	1 U	1 U	1 U		5.7	1 U	1 U	1 U	7.6		1 U	1 U	1 U	1 U	3	1 U		76	1 U	1 U
	04/15/92		0.5 U	0.78	1.6	3	0.5 U	0.5 U	120	43	0.5 U	0.5 U	0.5 U	0.5 U	1.8	0.5 U	0.5 U	0.5 U	2.5	0.5 U	1.3	0.5 U	0.5 U	0.6	0.5 U	0.5 U	0.5 U	25	0.5 U	0.5 U
	07/15/92		0.5 U	1 U	1 U	1 U		2 U	110	39	2 U	2 U			5.4	1 U	2 U	2 U	3.8		3.1	2 U	2 U	1 U	2 U	2 U		76	2 U	2 U
	10/15/92		0.52	1 U	1 U	1 U		5 U	180	80	5 U	5 U			8.1	1 U	5 U	5 U	8.7		6.9	1 U	5 U	1 U	1 U	5 U		130	5 U	5 U
	01/15/93		2.5 U	5 U	5 U	5 U		5 U	120	57	5 U	5 U			8.7	5 U	5 U	5 U	6.5		5 U	5 U	5 U	5 U	5 U	5 U		84	5 U	5 U
	04/20/93		0.5 U	1 U	1 U	1 U		1 U	100	28	1 U	1 U			1 U	1 U	1 U	1 U	1.5		11 B	1 U	1 U	1 U	1 U	1 U		12	1 U	1 U
	07/12/93		0.5 U	3.3	2.8	6.9		2.5 U	110	37	2.5 U	2.5 U			2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		4.5 B	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		16	2.5 U	2.5 U
	10/12/93		0.5 U	1 U	2.8	4.8		5 U	110	30	5 U	5 U			5 U	5 U	5 U	5 U	5 U		5 U	5 U	5 U	5 U	5 U	5 U		17	5 U	5 U
	01/11/94		0.5 U	1 U	1 U	1 U		2 U	120	28	2 U	2 U			2 U	2 U	2 U	2 U	2 U		2 U	2 U	2 U	2 U	2 U	2 U		10	2 U	2 U
	04/12/94		0.5 U	1 U	1 U	1 U		2 U	68	28	2 U	2 U			2 U	2 U	2 U	2 U	2 U		2 U	2 U	2 U	2 U	2 U	2 U		16	2 U	2 U
	07/18/94		0.5 U	1 U	1 U	1 U		2.5 U	180	82	2.5 U	2.5 U			2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		26	2.5 U	2.5 U
	10/11/94		1.2	3.5	1.5	12		2.5 U	120	60	2.5 U	2.5 U			6.8	2.5 U	2.5 U	2.5 U	7.5		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		76	2.5 U	2.5 U
	01/17/95		0.5 U	1 U	1 U	1 U		4 U	140	53	4 U	4 U			6.1	4 U	4 U	4 U	6		4 U	4 U	4 U	4 U	4 U	4 U		72	4 U	4 U
	04/17/95		0.5 U	1 U	1.3	1 U		10 U	180	72	10 U	10 U			10 U	10 U	10 U	10 U	10 U		55 B	10 U	10 U	10 U	10 U	10 U		57	10 U	10 U
	07/11/95		0.5 U	2	6.2	8.6		5 U	91	35	5 U	5 U			5 U	5 U	5 U	5 U	5 U		5 U	5 U	5 U	5 U	5 U	5 U		9.5	5 U	5 U
	10/10/95		0.5 U	1 U	1.7	3.3		10 U	110	56	10 U	10 U			10 U	10 U	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U		30	10 U	10 U
	01/30/96		0.5 U	1 U	1.6	5.2		2 U	58	27	2 U	2 U			3.3	2 U	2 U	2 U	3.3		2.5	2 U	2 U	2 U	2 U	2 U		26	2 U	2 U
	04/15/96		0.5 U	1 U	2.6	3.6		5 U	100	46	5 U	5 U			5 U	5 U	5 U	5 U	7		5 U	5 U	5 U	5 U	5 U	5 U		46	5 U	5 U
	07/16/96		0.5 U	1.6	9	12		2.5 U	50	23	2.5 U	2.5 U			2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		2.5 U	2.5 U	2.8 U	2.5 U	2.5 U	2.5 U		17	2.5 U	2.5 U
	10/08/96		0.5 U	1 U	6.4	6.2		2 U	44	31	2 U	2 U			2.3	2 U	2 U	2 U	2.4		2 U	2 U	2 U	2 U	2 U	2 U		21	2 U	2 U
	01/14/97		0.5 U	2.6	1.1	4.2		1 U	88	29	1 U	1 U			2.1	1 U	1 U	1 U	3.8		1 U	1 U	1 U	1 U	1 U	1 U		28	1 U	1 U
	04/15/97		0.5 U	4.3	2.1	3		1 U	40	22	1 U	1 U			1 U	1 U	1 U	1 U	1.7		1 U	1 U	1 U	7.1	1 U	1 U		13	1 U	1 U
	07/08/97		0.5 U	1 U	2.5	3.7		1 U	27	14	1 U	1 U			1.8	2.3	1 U	1 U	1.8		1 U	1 U	1 U	6.7	1 U	1 U		13	1 U	1 U
	10/15/97		0.57	1 U	1.7	1.2		1 U	34	21	1 U	1 U			2.8	1.3	1 U	1 U	3		1 U	1 U	1 U	3.6	1 U	1 U		24	1 U	1 U
	01/13/98		0.5 U	1 U	1.3	1 U		1 U	27	19	1 U	1 U			2	1 U	1 U	1 U	3.2		1 U	1 U	1 U	1.8	1 U	1 U		25	1 U	1 U
	04/22/98		0.5 U	1 U	1 U	1 U		1 U	30	22	1 U	1 U			1.6	1 U	1 U	1 U	2.9		1 U	1 U	1 U	1 U	1 U	1 U		16	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated																Chlorinated											
MW-03	07/15/98		0.5 U	1 U	1 U	1 U		1 U	42	36	1 U	1 U			2.8	1 U	1 U	1 U	3.6		1 U	1 U	1 U	2.2	1 U	1 U		25	1 U	1 U
	10/20/98		0.5 U	1 U	1 U	1 U		1 U	52	40	1 U	1 U			2.4	1 U	1 U	1 U	3.4		1 U	1 U	1 U	2.6	1 U	1 U		24	1 U	1 U
	01/15/99		0.5 U	1 U	2.3	1 U		1 U	73	18	1 U	1 U			2.4	1 U	1 U	1 U	3.9		1 U	1 U	1 U	1.9	1 U	1 U		26	1 U	1 U
	04/15/99		1 U	1 U	1.1	2 U		1 U	38	24	2 U	2 U	1 U		1.4	1 U	1 U	1 U	2.7		1 U	1 U	1 U	1.8	1 U	1 U		21	2 U	2 U
	07/15/99		1 U	1 U	1.3	1 U		1 U	41	30	2 U	2 U	1 U		3.6	1 U	1 U	1 U	9		1 U	1 U	1 U	37	1.9	1 U		43	2 U	2 U
	10/15/99		5 U	5 U	200	10 U		5 U	61	38	10 U	10 U	5 U		15	14	5 U	5 U	23		5 U	5 U	5 U	5 U	5 U	5 U		170	10 U	10 U
	01/25/00		2.5 U	2.5 U	54	70		2.5 U	40	27	5 U	5 U	6		16	2.5 U	2.5 U	2.5 U	30		2.5 U	2.5 U	2.5 U	19	2.5 U	2.5 U		170	5 U	5 U
	04/15/00		2.5 U	2.5 U	65	2.5		2.5 U	85	41	5 U	5 U	2.5 U		18	6	2.5 U	2.5 U	30		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		170	5 U	5 U
	10/15/00		1 U	1 U	2	1 U		1 U	1 U	1.3	2 U	2 U	1.1		0.5	1 U	1 U	1 U	3.7		1 U	1 U	1 U	1 U	1 U	1 U		43	2 U	2 U
	04/15/01		2 U	2 U	12	3.1		2 U	48	42	4 U	4 U	2 U		17	6	2 U	2 U	24		2 U	2 U	2 U	5.4	2 U	2 U		150	4 U	4 U
	07/17/01		1 U	1 U	1 U	1 U		1 U	29	20	2 U	2 U	1 U		5.1	1 U	1 U	1 U	6		1 U	1 U	1 U	2.3	1 U	1 U		41	2 U	2 U
	10/17/01		5 U	5 U	5 U	5 U		5 U	39	36	10 U	10 U	5 U		35	5 U	5 U	5 U	35		5 U	5 U	5 U	5.1	5 U	5 U		290	10 U	10 U
	01/16/02		2.5 U	2.5 U	2.5 U	2.5 U		2.5 U	33	30	5 U	5 U	2.5 U		30	2.5 U	2.5 U	2.5 U	28		2.5 U	2.5 U	2.5 U	5.6	2.5 U	2.5 U		220	5 U	5 U
	04/16/02		5 U	5 U	5 U	10 U		5 U	38	38	10 U	10 U	5 U		44	5 U	5 U	5 U	35		5 U	5 U	5 U	5 U	5 U	5 U		280	10 U	10 U
	07/24/02		5 U	5 U	5 U	10 U		5 U	28	31	10 U	10 U	5 U		34	5 U	5 U	5 U	38		5 U	5 U	5 U	5.5	5 U	5 U		280	10 U	10 U
	10/22/02		10 U	10 U	83	700		10 U	10 U	13	20 U	20 U	10 U		17	25	10 U	10 U	30		10 U	10 U	10 U	10 U	10 U	10 U		180	20 U	20 U
	01/08/03		1.6	2 U	2 U	2.3	2 U	2 U	22	27	2 U	2 U	2 U	2 U	32	15	2 U	2 U	48	10 U	10 U	2 U	2 U	5.6	2 U	2 U	2 U	250	2 U	1 U
	04/23/03		1 U	2 U	2 U	4 U	2 U	2 U	46	47	2 U	2 U	2 U	2 U	34	3.8	2 U	2 U	34	10 U	10 U	2 U	2 U	8.3	2 U	2 U	2 U	190	2 U	1 U
	07/29/03		2.5 U	5 U	5 U	10 U	5 U	5 U	70	72	5 U	5 U	5 U	5 U	37	6	5 U	5 U	34	25 U	25 U	5 U	5 U	11	5 U	5 U	5 U	280	5 U	2.5 U
	10/21/03		2.5	1 U	1800	200	11	1 U	17	18	1 U	1 U	12	1 U	19	9	1 U	1 U	18	5 U	5 U	1 U	1 U	4	1 U	1 U	1 U	110	1 U	0.5 U
	01/21/04		1.6	1 U	60	2 U	1.4	1 U	25	24	1 U	1 U	16	1 U	34	76	1 U	1 U	33	5 U	5 U	1 U	1 U	4.1	1 U	1 U	1 U	200	1 U	0.5 U
	04/20/04		1.2	1 U	1 U	2 U	1 U	1 U	49	32	1 U	1 U	8.8	1 U	29	40	1 U	1 U	31	5 U	5 U	1 U	1 U	5.1	1 U	1 U	1 U	180	1 U	0.5 U
	07/20/04		0.74	1 U	1 U	2 U	1 U	1	47	39	1 U	1 U	6.5	1 U	36	45	1 U	1 U	30	5 U	5 U	1 U	1 U	4.9	1 U	1 U	1 U	200	1 U	0.5 U
	10/12/04		0.5 U	1 U	1 U	2 U	1 U	1.7	48	54	1 U	1 U	6	1 U	39	16	1 U	1 U	24	5 U	5 U	1 U	1 U	6.8	1 U	1 U	1 U	180	1 U	0.5 U
MW-04	01/15/89		0.5 U	10	15			0.2 U	0.2 U	3.7	0.2 U	0.2 U			38	20	0.2 U	0.2 U	22	0.2 U	14	0.2 U	0.2 U	1.6	0.08	0.2 U		120	0.2 U	0.2 U
	01/15/89	K	5 U	12	90	66		5 U	5 U	5 U	5 U	5 U			49	18	5 U	5 U	18	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U	5 U	5 U
	04/15/89		6 U	23	15	50		5 U	5 U	12	5 U	5 U			92	5 U	5 U	5 U	55	5 U	94	5 U	5 U	5 U	5 U	5 U		28	5 U	5 U
	04/15/89	K	6 U	14	9	43		5 U	5 U	25	5 U	6 U		5 U	74	58	5 U	5 U	54	5 U	5 U	5 U	5 U	5 U	5 U	5 U		210	5 U	5 U
	07/15/89		14 U	20 U	140	40		20 U	20 U	20 U	20 U	20 U			80	120	20 U	20 U	50		170	20 U	20 U	20 U	20 U	20 U		290	20 U	20 U
	07/15/89	K	14 U	20	130	45		20 U	20 U	20 U	20 U	20 U			80	120	20 U	20 U	50		170	20 U	20 U	20 U	20 U	20 U		290	20 U	20 U
	10/15/89		5 U	10 U	10 U	10 U		10 U	10 U	10	10 U	10 U			100	70	10 U	10 U	80		30	20	10 U	10 U	10	10 U		250	10 U	10 U
	10/15/89	K	6	20	10 U	20		10 U	10 U	10	10 U	10 U			100	80	10 U	10 U	80		30	20	10 U	10 U	10	10 U		250	10 U	10 U
	01/24/90		12 U	12 U	12 U	25 U		12 U	5 U	5.1	5 U	5 U			72	100	12 U	12 U	33	5 U	74		5 U	5 U	5 U	5 U		220	50 U	5 U
	01/24/90	K	12 U	11 U	12 U	25 U		12 U	5 U	5.2	5 U	5 U			74	100	12 U	12 U	40	5 U	74		5 U	5 U	5 U	5 U		240	50 U	5 U
	04/11/90		10 U	10 U	10 U	20 U		10 U	4 U	8	4 U	4 U			67	140	10 U	10 U	36	4 U	54		4 U	4 U	4 U	4 U		280	40 U	4 U
	04/11/90	K	10 U	10 U	10 U	20 U		10 U	4 U	6.4	4 U	4 U			78	180	10 U	10 U	45	4 U	58		4 U	4 U	4 U	4 U		320	40 U	4 U
	07/15/90		50 U	50 U	1600	170		50 U	20 U	20 U	20 U	20 U	20 U		65	200	50 U	50 U	43	20 U	200 U	20 U	20 U	20 U	20 U	20 U		320	200 U	20 U
	07/15/90	K	25 U	25 U	740	250		25 U	10 U	12	10 U	10 U	10 U		110	200	25 U	25 U	76	10 U	100 U	10 U	10 U	10 U	10 U	10 U		400	100 U	10 U
	10/15/90		0.5 U	17	230	650		13 U	13 U	13 U	25 U	25 U		25 U	80	380	10 U	10 U	54	50 U	38	13 U	13 U	13 U	13 U	13 U	10 U	250	13 U	25 U
	10/15/90	K	13 U	17	220	640		13 U	13 U	13 U	25 U	25 U		25 U	76	350	10 U	10 U	51	50 U	38	13 U	13 U	13 U	13 U	13 U	10 U	250	13 U	25 U
	01/15/91		0.5 U	1 U	1 U	1			1 U	1 U					57	180			1 U		1 U		1 U	1 U				180		
	04/15/91		10 U	20 U	730	880		10 U	10 U	10 U	10 U	10 U			40	180	10 U	10 U	21		43	10 U	10 U	10 U	10 U	10 U		170	10 U	10 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2 PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated					Chlorinated																						
MW-04	07/15/91		0.5 U	18000	6700	18000		10 U	10 U	12	10 U	10 U			86	95	10 U	10 U	40		94	10 U	10 U	10 U	10 U	10 U		180	10 U	10 U
	07/15/91	K	250 U	6800	16000	19000		10 U	10 U	13	10 U	10 U			70	98	10 U	10 U	39		10 U	10 U	10 U	10 U	10 U	10 U		200	10 U	10 U
	10/21/91		1000 U	6900	4100	10000		1000 U	400 U	400 U	400 U	400 U	400 U		400 U	400 U	1000 U	1000 U	400 U	2000 U	4000 U	400 U	400 U	400 U	400 U	400 U		400 U	4000 U	400 U
	01/15/92		250 U	18000	10000	17200	250 U	250 U	250 U	250 U	500 U	500 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	500 U	1300 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	500 U	500 U
	01/15/92	K	250 U	18000	10000	16200	250 U	250 U	250 U	250 U	500 U	500 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	500 U	1300 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	500 U	500 U
	04/15/92		5.7	7.2	960	1010	5 U	5 U	5 U	15	5 U	5 U	24	5 U	120	49	5 U	5 U	87	5 U	16	5 U	5 U	5 U	5 U	5 U	5 U	200	5 U	5 U
	04/15/92	K	12 U	12 U	1100	1010	21	12 U	12 U	17	12 U	12 U	25	12 U	140	57	12 U	12 U	77	12 U	56	12 U	12 U	12 U	12 U	12 U	12 U	350	12 U	12 U
	07/15/92		5 U	10 U	200	280		10 U	10 U	12	10 U	10 U			74	32	10 U	10 U	53		51	10 U	10 U	10 U	10 U	10 U		280	10 U	10 U
	07/15/92	K	5 U	10 U	200	280		10 U	10 U	12	10 U	10 U			74	30	10 U	10 U	51		57	10 U	10 U	10 U	10 U	10 U		200	10 U	10 U
	10/15/92		71	1 U	1300	230		10 U	1 U	1 U	10 U	10 U			48	18	10 U	10 U	32		28	1 U	10 U	1 U	1 U	10 U		230	10 U	10 U
	10/15/92	K	71	1 U	1200	200		10 U	1 U	1 U	10 U	10 U			53	18	10 U	10 U	37		29	1 U	10 U	1 U	1 U	10 U		280	10 U	10 U
	01/15/93		130 U	10000	10000	19000		250 U	250 U	250 U	250 U	250 U			250 U	250 U	250 U	250 U	250 U		250 U	250 U	250 U	250 U	250 U	250 U		250 U	250 U	250 U
	01/15/93	K	130 U	11000	11000	20000		250 U	250 U	250 U	250 U	250 U			250 U	250 U	250 U	250 U	250 U		250 U	250 U	250 U	250 U	250 U	250 U		250 U	250 U	250 U
	04/20/93		0.5 U	1 U	98	13		1 U	1 U	1 U	1 U	1 U			4.2	11	1 U	1 U	3.9		3.8 B	1 U	1 U	1 U	1 U	1 U		25	1 U	1 U
	04/20/93	K	0.5 U	1 U	86	15		1 U	1 U	1 U	1 U	1 U			4	11	1 U	1 U	3.4		8.4 B	1 U	1 U	1 U	1 U	1 U		27	1 U	1 U
	07/13/93		0.6	2	1.8	11		2.5 U	2.5 U	2.8	2.5 U	2.5 U			29	9	2.5 U	2.5 U	23		17 B	3.3	2.5 U	2.5 U	2.5 U	2.5 U		100	2.5 U	2.5 U
	07/13/93	K	0.56	1.7	1.5	9.9		2 U	2 U	3	2 U	2 U			29	9.6	2 U	2 U	24		20 B	4	2 U	2 U	2 U	2 U		100	2 U	2 U
	10/13/93		1.3	1 U	1 U	40		10 U	10 U	11	10 U	10 U			86	13	10 U	10 U	56		58	10 U	10 U	10 U	10 U	10 U		280	10 U	10 U
	10/14/93	K	5 U	10 U	320	10 U		1 U	1 U	1 U	1 U	1 U			24	8	1 U	1 U	4.8		1 U	1 U	1 U	1 U	1 U	1 U		21	1 U	1 U
	01/11/94		0.81	1 U	8.3	14		5 U	5 U	5 U	5 U	5 U			42	5 U	5 U	5 U	43		23 B	5 U	5 U	5 U	5 U	5 U		130	5 U	5 U
	01/11/94	K	1	1 U	7.2	20		5 U	5 U	5 U	5 U	5 U			52	5 U	5 U	5 U	58		30	5 U	5 U	5 U	5 U	5 U		180	5 U	5 U
	04/13/94		0.5 U	1 U	4	6.5		5 U	5 U	5 U	5 U	5 U			42	5 U	5 U	5 U	33		19	5 U	5 U	5 U	5 U	5 U		180	5 U	5 U
	04/13/94	K	0.5 U	1 U	3.2	6.4		5 U	5 U	5 U	5 U	5 U			42	5 U	5 U	5 U	32		20	5 U	5 U	5 U	5 U	5 U		180	5 U	5 U
	07/19/94		0.58	1 U	1 U	4.2		10 U	10 U	10 U	10 U	10 U			88	10 U	10 U	10 U	59		33 B	10 U	10 U	10 U	10 U	10 U		340	10 U	10 U
	07/19/94	K	0.59	1 U	1 U	3.6		10 U	10 U	10 U	10 U	10 U			87	10 U	10 U	10 U	60		34	10 U	10 U	10 U	10 U	10 U		340	10 U	10 U
	10/11/94		5 U	10 U	270	39		10 U	10 U	21	10 U	10 U			110	10 U	10 U	10 U	78		97	10 U	10 U	10 U	10 U	10 U		380	10 U	10 U
	10/11/94	K	5 U	10 U	320	46		10 U	10 U	20	10 U	10 U			120	10 U	10 U	10 U	88		100	10 U	10 U	10 U	10 U	10 U		420	10 U	10 U
	01/18/95		5 U	10 U	350	130		10 U	10 U	10 U	10 U	10 U			51	10 U	10 U	10 U	37		21 B	10 U	10 U	10 U	10 U	10 U		190	10 U	10 U
	01/18/95	K	5 U	10 U	380	120		10 U	10 U	10 U	10 U	10 U			51	10 U	10 U	10 U	37		20 B	10 U	10 U	10 U	10 U	10 U		180	10 U	10 U
	04/18/95		100 U	1600	1700	2800		10 U	10 U	10 U	10 U	10 U			32	10 U	10 U	10 U	15		34 B	10 U	10 U	10 U	10 U	10 U		87	10 U	10 U
	04/18/95	K	100 U	1400	1500	2800		10 U	10 U	10 U	10 U	10 U			31	10 U	10 U	10 U	15		41 B	10 U	10 U	10 U	10 U	10 U		51	10 U	10 U
	07/12/95		10 U	270	260	880		5 U	5 U	5 U	5 U	5 U			27	8.3	5 U	5 U	17		19 B	5 U	5 U	5 U	5 U	5 U		90	5 U	5 U
	07/12/95	K	10 U	410	380	1300		10 U	10 U	10 U	10 U	10 U			27	10 U	10 U	10 U	17		20 B	10 U	10 U	10 U	10 U	10 U		94	10 U	10 U
	10/10/95		2.5 U	5 U	75	21		10 U	10 U	10 U	10 U	10 U			59	10 U	10 U	10 U	34		42	10 U	10 U	10 U	10 U	10 U		150	10 U	10 U
	10/10/95	K	2.5 U	5 U	79	23		10 U	10 U	10 U	10 U	10 U			61	10 U	10 U	10 U	36		42	10 U	10 U	10 U	10 U	10 U		160	10 U	10 U
	01/31/96		50 U	100 U	2100	1400		10 U	10 U	10 U	10 U	10 U			46	14	10 U	10 U	25		26	10 U	10 U	10 U	10 U	10 U		180	10 U	10 U
	01/31/96	K	50 U	120	2800	1800		10 U	10 U	10 U	10 U	10 U			52	11	10 U	10 U	29		30	10 U	10 U	10 U	10 U	10 U		150	10 U	10 U
	04/16/96		25 U	680	1300	1400		10 U	10 U	10 U	10 U	10 U			52	15	10 U	10 U	39		31	10 U	10 U	10 U	10 U	10 U		130	10 U	10 U
	04/16/96	K	25 U	600	1100	1200		10 U	10 U	10 U	10 U	10 U			86	16	10 U	10 U	48		35	10 U	10 U	10 U	10 U	10 U		150	10 U	10 U
	07/16/96		50 U	100 U	1000	270		10 U	10 U	10 U	10 U	10 U			48	10 U	10 U	10 U	32		31	10 U	10 U	10 U	10 U	10 U		140	10 U	10 U
	07/16/96	K	0.5 U	1 U	1000	250		10 U	10 U	10 U	10 U	10 U			44	10 U	10 U	10 U	30		29	10 U	10 U	10 U	10 U	10 U		130	10 U	10 U
	10/09/96		50 U	380	1100	1800		20 U	20 U	22	20 U	20 U			100	20 U	20 U	20 U	48		110	20 U	20 U	20 U	20 U	20 U		310	20 U	20 U

PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Non-chlorinated

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE
MW-04	10/08/96	K	50 U	370	1100	1900		20 U	20 U	24	20 U	20 U	
	01/14/97		6.2 U	12 U	1100	12 U		12 U	12 U	12 U	12 U	12 U	
	01/14/97	K	6.2 U	12 U	970	12 U		12 U	12 U	12 U	12 U	12 U	
	04/16/97		12 U	35	1300	620		25 U	25 U	25 U	25 U	25 U	
	04/16/97	K	12 U	34	1300	580		25 U	25 U	25 U	25 U	25 U	
	07/08/97		5 U	10 U	810	110		10 U	10 U	10 U	10 U	10 U	
	07/08/97	K	5 U	10 U	880	120		10 U	10 U	10 U	10 U	10 U	
	10/16/97		5 U	10 U	480	31		10 U	10 U	27	10 U	10 U	
	10/16/97	K	5 U	10 U	430	76		10 U	10 U	26	10 U	10 U	
	01/14/98		5 U	10 U	530	420		10 U	10 U	10 U	10 U	10 U	
	01/14/98	K	2.5 U	5 U	480	380		5 U	5 U	9.2	5 U	5 U	
	04/22/98		2.9	5 U	320	5 U		5 U	5 U	5 U	5 U	5 U	
	04/22/98	K	2.8	5 U	300	5 U		5 U	5 U	5 U	5 U	5 U	
	07/15/98		12 U	25 U	1200	300		25 U	25 U	25 U	25 U	25 U	
	07/15/98	K	12 U	25 U	1300	320		25 U	25 U	25 U	25 U	25 U	
	10/21/98		6.2 U	12 U	740	240		12 U	12 U	12	12 U	12 U	
	10/21/98	K	6.2 U	12 U	740	240		12 U	12 U	13	12 U	12 U	
	01/15/99		5 U	10 U	520	31		10 U	10 U	36	10 U	10 U	
	01/15/99	K	3.5 U	2.5 U	520 U	8.8 U		10 U	10 U	42	10 U	10 U	
	04/15/99		3.5	2.5 U	220	9.9		2.5 U	2.5 U	10	5 U	5 U	68
	04/15/99	K	3.6	2.5 U	230	7.5		2.5 U	2.5 U	10	5 U	5 U	88
	07/15/99		10 U	10 U	670	87		10 U	10 U	10 U	20 U	20 U	100
	07/15/99	K	10 U	10 U	600	80		10 U	10 U	11	20 U	20 U	120
	10/15/99		5 U	5 U	92	11		5 U	5 U	25	10 U	10 U	160
	10/15/99	K	5 U	5 U	80	13		5 U	5 U	38	10 U	10 U	170
	01/27/00		5.1	2.5 U	2.5 U	6		2.5 U	2.5 U	18	5 U	5 U	170
	01/27/00	K	5	2.5 U	2.5 U	6		2.5 U	2.5 U	18	5 U	5 U	170
	04/15/00		5 U	5 U	46	8.6		5 U	5 U	13	10 U	10 U	130
	04/15/00	K	5 U	5 U	43	9.5		5 U	5 U	15	10 U	10 U	140
	10/15/00		50 U	50 U	2500	50 U		50 U	50 U	50 U	100 U	100 U	130
	10/15/00	K	50 U	50 U	2400	50 U		50 U	50 U	50 U	100 U	100 U	130
	04/15/01		50 U	120	3100	830		50 U	50 U	50 U	100 U	100 U	100
	04/15/01	K	50 U	120	3000	830		50 U	50 U	50 U	100 U	100 U	110
	07/18/01		50 U	50 U	2400	50 U		50 U	50 U	50 U	100 U	100 U	50 U
	07/18/01	K	50 U	50 U	2400	50 U		50 U	50 U	50 U	100 U	100 U	50 U
	10/18/01		50 U	50 U	3700	50 U		50 U	50 U	50 U	100 U	100 U	65
	10/18/01	K	50 U	50 U	2800	50 U		50 U	50 U	50 U	100 U	100 U	81
	01/17/02		10 U	10 U	880	10 U		10 U	10 U	10 U	20 U	20 U	63
	01/17/02	K	10 U	10 U	720	10 U		10 U	10 U	10 U	20 U	20 U	70
	04/18/02		50 U	50 U	2200	170		50 U	50 U	50 U	100 U	100 U	88
	04/18/02	K	50 U	50 U	1900	180		50 U	50 U	50 U	100 U	100 U	84
	07/25/02		7.7	5 U	220	320		5 U	5 U	19	10 U	10 U	210

Chlorinated

Well Number	Sample Date	Sample Type	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-04	10/08/96	K		110	20 U	20 U	20 U	27		110	20 U	20 U	20 U	20 U	20 U		330	20 U	20 U
	01/14/97			130	38	12 U	12 U	76		58	12 U	12 U	12 U	12 U	12 U		330	12 U	12 U
	01/14/97	K		130	34	12 U	12 U	69		56	12 U	12 U	12 U	12 U	12 U		290	12 U	12 U
	04/16/97			67	25 U	25 U	25 U	32		31	25 U	25 U	25 U	25 U	25 U		150	25 U	25 U
	04/16/97	K		62	25 U	25 U	25 U	30		29	25 U	25 U	25 U	25 U	25 U		150	25 U	25 U
	07/08/97			42	10 U	10 U	10 U	32		35	10 U	10 U	10 U	10 U	10 U		150	10 U	10 U
	07/08/97	K		42	10 U	10 U	10 U	33		36	10 U	10 U	10 U	10 U	10 U		180	10 U	10 U
	10/16/97			140	12	10 U	10 U	69		140	10 U	10 U	10 U	10 U	10 U		230	10 U	10 U
	10/16/97	K		140	12	10 U	10 U	64		140	10 U	10 U	10 U	10 U	10 U		220	10 U	10 U
	01/14/98			72	61	10 U	10 U	42		48	10 U	10 U	10 U	10 U	10 U		180	10 U	10 U
	01/14/98	K		67	58	5 U	5 U	43		44	5 U	5 U	5 U	5 U	5 U		170	5 U	5 U
	04/22/98			37	110	5 U	5 U	25		17	5 U	5 U	5 U	5 U	5 U		92	5 U	5 U
	04/22/98	K		35	100	5 U	5 U	24		16	5 U	5 U	5 U	5 U	5 U		88	5 U	5 U
	07/15/98			28	25 U	25 U	25 U	25 U		28	25 U	25 U	25 U	25 U	25 U		120	25 U	25 U
	07/15/98	K		31	25 U	25 U	25 U	27		29	25 U	25 U	25 U	25 U	25 U		120	25 U	25 U
	10/21/98			94	22	12 U	12 U	29		82	12 U	12 U	12 U	12 U	12 U		120	12 U	12 U
	10/21/98	K		88	23	12 U	12 U	29		88	12 U	12 U	12 U	12 U	12 U		130	12 U	12 U
	01/15/99			140	33	10 U	10 U	80		140	10 U	10 U	10 U	10 U	10 U		200	10 U	10 U
	01/15/99	K		170	40	10 U	10 U	71		200	10 U	10 U	10 U	10 U	10 U		200 U	10 U	10 U
	04/15/99			84	88	2.5 U	2.5 U	40		36	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		190	5 U	5 U
	04/15/99	K		88	68	2.5 U	2.5 U	43		37	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		190	5 U	5 U
	07/15/99			58	87	10 U	10 U	36		38	10 U	10 U	10 U	10 U	10 U		140	20 U	20 U
	07/15/99	K		68	77	10 U	10 U	42		46	10 U	10 U	12	10 U	10 U		150	20 U	20 U
	10/15/99			170	85	5 U	5 U	82		130	5 U	5 U	5 U	5 U	5 U		210	10 U	10 U
	10/15/99	K		180	74	5 U	5 U	88		190	6.4	5 U	5 U	5 U	5 U		220	10 U	10 U
	01/27/00			160	18	2.5 U	2.5 U	65		100	4.9	2.5 U	8.6	2.5 U	2.5 U		180	5 U	5 U
	01/27/00	K		160	18	2.5 U	2.5 U	64		100	4.7	2.5 U	8.7	2.5 U	2.5 U		180	5 U	5 U
	04/15/00			170	94	5 U	5 U	98		53	5 U	5 U	5 U	5 U	5 U		240	10 U	10 U
	04/15/00	K		190	100	5 U	5 U	110		80	5 U	5 U	5 U	5 U	5 U		270	10 U	10 U
	10/15/00			74	99	50 U	50 U	1 U		50 U	50 U	50 U	50 U	50 U	50 U		170	100 U	100 U
	10/15/00	K		80	100	50 U	50 U	1 U		50 U	50 U	50 U	50 U	50 U	50 U		180	100 U	100 U
	04/15/01			56	50 U	50 U	50 U	50 U		50 U	50 U	50 U	50 U	50 U	50 U		150	100 U	100 U
	04/15/01	K		57	50 U	50 U	50 U	50 U		50 U	50 U	50 U	50 U	50 U	50 U		150	100 U	100 U
	07/18/01			50 U	50 U	50 U	50 U	50 U		50 U	50 U	50 U	50 U	50 U	50 U		74	100 U	100 U
	07/18/01	K		50 U	50 U	50 U	50 U	50 U		50 U	50 U	50 U	50 U	50 U	50 U		78	100 U	100 U
	10/18/01			73	50 U	50 U	50 U	50 U		50 U	50 U	50 U	50 U	50 U	50 U		170	100 U	100 U
	10/18/01	K		80	50 U	50 U	50 U	50 U		58	50 U	50 U	50 U	50 U	50 U		220	100 U	100 U
	01/17/02			65	180	10 U	10 U	31		20	10 U	10 U	10 U	10 U	10 U		130	20 U	20 U
	01/17/02	K		58	180	10 U	10 U	32		24	10 U	10 U	10 U	10 U	10 U		140	20 U	20 U
	04/18/02			100	50 U	50 U	50 U	57		58	50 U	50 U	50 U	50 U	50 U		280	100 U	100 U
	04/18/02	K		100	50 U	50 U	50 U	86		60	50 U	50 U	50 U	50 U	50 U		280	100 U	100 U
	07/25/02			180	32	5 U	5 U	110		86	5 U	5 U	5 U	5 U	5 U		210	10 U	10 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE
			Non-chlorinated					Chlorinated						
MW-04	07/25/02	K	7.8	5 U	200	317		5 U	5 U	18	10 U	10 U	200	
	10/23/02		12 U	12 U	820	1650		12 U	12 U	20	25 U	25 U	240	
	10/23/02	K	12 U	12 U	880	1760		12 U	12 U	21	25 U	25 U	250	
	12/30/02		3.8	0.37 J	51	81		1.5 J	2.5 U	8.1	0.47 J	2.5 U	130 E	2.5 U
	12/30/02	K	3.8 J	0.4 J	49	78		1.6 J	5 U	9.7	5 U	5 U	140	5 U
	04/25/03		5.8	5 U	540	31	6.4	5 U	2.5 U	17	5 U	5 U	210	5 U
	04/25/03	K	5.6	5 U	500	28.4	5.8	5 U	2.5 U	18	5 U	5 U	220	5 U
	07/30/03		5.8	5 U	5 U	10 U	5 U	5 U	2.5 U	25	5 U	5 U	230	5 U
	07/30/03	K	7	10 U	10 U	20 U	10 U	10 U	5 U	25	10 U	10 U	250	10 U
	10/23/03		20 U	20 U	410	40 U		20 U	50 U	20 U	50 U	50 U	160	
	10/23/03	K	8 U	8 U	380	16 U		8 U	20 U	13	20 U	20 U	180	
	01/23/04		5.7	4 U	200	8.6	21	4 U	2 U	16	4 U	4 U	170	4 U
	01/23/04	K	6.3	2.5 U	210	13	25	3.2	1.2 U	16	2.5 U	2.5 U	150	2.5 U
	04/21/04		3.3	4 U	4 U	8 U	4.3	4 U	2 U	14	4 U	4 U	110	4 U
	04/21/04	K	3.3	2.5 U	2.5 U	5 U	4.4	3.1	1.2 U	14	2.5 U	2.5 U	110	2.5 U
	07/21/04		2.5 U	5 U	5 U	10 U	5 U	5 U	2.5 U	14	5 U	5 U	83	5 U
	07/21/04	K	2.5 U	5 U	5 U	10 U	5 U	5 U	2.5 U	14	5 U	5 U	82	5 U
	10/12/04		2 U	2 U	2 U	4 U		2 U	5 U	2	5 U	5 U	51	
	10/12/04	K	1.3	1 U	1 U	2 U	1 U	1.8	0.5 U	2	1 U	1 U	51	1 U
MW-04A	01/15/89		0.5 U	0.5 U	0.5 U			0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		
	04/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	07/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	10/15/89		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	01/24/90		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.2 U	0.2 U	0.2 U		
	04/12/90		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.2 U	0.2 U	0.2 U		
	07/15/90		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
	10/15/90		0.5 U	1 U	1 U	1 U		5 U	1 U	1 U	10 U	10 U		10 U
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U				
	04/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	04/15/91	K	0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	07/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	10/23/01		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.23	0.2 U	0.2 U	0.2 U	
	01/15/92		1	1	2	2		1 U	1 U	1 U	1 U	1 U	1 U	
	04/15/92		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	07/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	10/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	4.2	1 U	1 U		
	01/15/93		0.5 U	3	3.5	8.8		1 U	1 U	1 U	1 U	1 U		
	04/20/93		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	07/13/93		0.5 U	2.7	1.8	4.8		1 U	1 U	1 U	1 U	1 U		
	10/13/93		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	01/11/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		
	04/13/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		

Well Number	Sample Date	Sample Type	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,3-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Chlorinated															
MW-04	07/25/02	K	170	32	5 U	5 U	110		84	5 U	5 U	5 U	5 U	5 U		210	10 U	10 U
	10/23/02		200	31	12 U	12 U	78		87	12 U	12 U	12 U	12 U	12 U	10 U	130	25 U	25 U
	10/23/02	K	210	28	12 U	12 U	82		90	12 U	12 U	12 U	12 U	12 U	10 U	140	25 U	25 U
	12/30/02		110	67	2.5 U	2.5 U	45	2.5 U	30	2.3 J	2.5 U	1.9 J	2.5 U	2.5 U		86	2.5 U	0.38 J
	12/30/02	K	120	64	5 U	5 U	48	5 U	38	2.8 J	5 U	2.1 J	5 U	5 U		90	5 U	0.34 J
	04/25/03		150	150	5 U	5 U	83	25 U	68	5 U	5 U	5 U	5 U	5 U	5 U	130	5 U	2.5 U
	04/25/03	K	150	140	5 U	5 U	83	25 U	76	5 U	5 U	5 U	5 U	5 U	5 U	140	5 U	2.5 U
	07/30/03		160	58	5 U	5 U	78	25 U	98	5 U	5 U	5 U	5 U	5 U	5 U	140	5 U	2.5 U
	07/30/03	K	170	59	10 U	10 U	80	50 U	100	10 U	10 U	10 U	10 U	10 U	10 U	130	10 U	5 U
	10/23/03		150	53	20 U	20 U	65	50 U	61	20 U	20 U	20 U	20 U	20 U	10 U	140	50 U	50 U
	10/23/03	K	180	56	8 U	8 U	73	20 U	58	8 U	8 U	8 U	8 U	8 U	10 U	150	20 U	20 U
	01/23/04		200	120	4 U	4 U	74	20 U	73	4 U	4 U	4 U	4 U	4 U	4 U	190	4 U	2 U
	01/23/04	K	190	140	2.5 U	2.5 U	76	12 U	67	3.4	2.5 U	3	2.5 U	2.5 U	2.5 U	200	2.5 U	1.2 U
	04/21/04		180	140	4 U	4 U	90	20 U	70	4 U	4 U	4 U	4 U	4 U	4 U	330	4 U	2 U
	04/21/04	K	180	160	2.5 U	2.5 U	90	12 U	70	3	2.5 U	3.9	2.5 U	2.5 U	2.5 U	330	2.5 U	1.2 U
	07/21/04		190	100	5 U	5 U	91	25 U	61	5 U	5 U	5 U	5 U	5 U	5 U	310	5 U	2.5 U
	07/21/04	K	180	100	5 U	5 U	80	25 U	63	5 U	5 U	5 U	5 U	5 U	5 U	310	5 U	2.5 U
	10/12/04		150	46	2 U	2 U	48	5 U	5 U	2 U	2 U	3.2	2 U	2 U	9.7 U	160	5 U	5 U
	10/12/04	K	170	48	1 U	1 U	62	5 U	5 U	2	1 U	3.5	1 U	1 U	1 U	190	1 U	0.5 U
MW-04A	01/15/89		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		8.7	0.2 U	0.2 U
	04/15/89		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		7	1 U	1 U
	07/15/89		1 U	1 U	1 U	1 U	1 U		2.7	1 U	1 U	1 U	1 U	1 U		5	1 U	1 U
	10/15/89		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3	1 U	1 U
	01/24/90		0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U		0.2 U	0.2 U	0.2 U	0.2 U		8	2 U	0.2 U
	04/12/90		0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U		0.2 U	0.2 U	0.2 U	0.2 U		2.7	2 U	0.2 U
	07/15/90		1.7	0.2 U	0.5 U	0.5 U	0.42	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		6.1	2 U	0.2 U
	10/15/90		1 U	1 U	10 U	10 U	1 U	20 U	1 U	1 U	5 U	1 U	1 U	5 U	10 U	1 U	5 U	10 U
	01/15/91		1 U	1 U			1 U		1 U		1 U	1 U				1 U		
	04/15/91		1 U	1 U	1 U	1 U	1 U		3.8 B	1 U	1 U	1 U	1 U	1 U		1.8	1 U	1 U
	04/15/91	K	1 U	1 U	1 U	1 U	1 U		4.1 B	1 U	1 U	1 U	1 U	1 U		1.5	1 U	1 U
	07/15/91		5	1 U	1 U	1 U	1 U		4.3	1 U	1 U	1 U	1 U	1 U		4.2	1 U	1 U
	10/23/01		1.3	0.2 U	0.5 U	0.5 U	0.2 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		2.2	2 U	0.2 U
	01/15/92		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2	1 U	1 U
	04/15/92		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U	0.5 U	0.5 U	1.4	0.5 U	0.5 U
	07/15/92		1 U	1 U	1 U	1 U	1 U		1.1	1 U	1 U	1 U	1 U	1 U		1.5	1 U	1 U
	10/15/92		40	1 U	1 U	1 U	12		4.7	1.4	1 U	1 U	1.2	1 U		45	1 U	1 U
	01/15/93		1.9	1 U	1 U	1 U	1 U		1	1 U	1 U	1 U	1 U	1 U		4.1	1 U	1 U
	04/20/93		1.2	1 U	1 U	1 U	1 U		17 B	1 U	1 U	1 U	1 U	1 U		2.7	1 U	1 U
	07/13/93		13	1 U	1 U	1 U	3		2.8 B	1.2	1 U	1 U	1 U	1 U		9.6	1 U	1 U
	10/13/93		8.5	1 U	1 U	1 U	1.6		2 B	1 U	1 U	1.1	1 U	1 U		7.8	1 U	1 U
	01/11/94		8.8	1 U	1 U	1 U	3.4		1 U	1 U	1 U	1 U	1 U	1 U		12	1 U	1 U
	04/13/94		4.2	1 U	1 U	1 U	1.6		1 U	1 U	1 J	1 U	1 U	1 U		9.2	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated					Chlorinated																						
MW-04A	07/19/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			6.8	1 U	1 U	1 U	2.4		1 U	1 U	1 U	1 U	1 U	1 U		11	1 U	1 U
	10/12/94		0.5 U	1 U	1 U	2.1		1 U	1 U	1 U	1 U	1 U			7.5	1 U	1 U	1 U	2.7		2.2 B	1 U	1 U	1 U	1 U	1 U		15	1 U	1 U
	01/18/95		0.5 U	1.5	2.7	2.9		1 U	1 U	1.7	1 U	1 U			36	1 U	1 U	1 U	11		2.4 B	1 U	1 U	1.8	1 U	1 U		30	1 U	1 U
	04/18/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			13	1 U	1 U	1 U	2.5		3.5 B	1 U	1 U	1 U	1 U	1 U		10	1 U	1 U
	07/12/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1.3	1 U	1 U			20	1 U	1 U	1 U	5		1.3 B	1 U	1 U	1.8	1 U	1 U		19	1 U	1 U
	10/10/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1.6	1 U	1 U			28	1 U	1 U	1 U	6.9		1.4	1 U	1 U	1.4	1 U	1 U		27	1 U	1 U
	01/31/96		0.5 U	1 U	1 U	1 U		1 U	1 U	1.6	1 U	1 U			25	1 U	1 U	1 U	5.8		1.4	1 U	1 U	1.3	1 U	1 U		18	1 U	1 U
	04/16/96		0.5 U	1 U	2.9	3.8		1 U	1 U	1.2	1 U	1 U			19	1 U	1 U	1 U	4.7		1 U	1 U	1 U	1 U	1 U	1 U		15	1 U	1 U
	07/16/96		0.5 U	1 U	1 U	1 U		1 U	1 U	1.1	1 U	1 U			24	1 U	1 U	1 U	3.7		1.2	1 U	1 U	1 U	1 U	1 U		16	1 U	1 U
	10/09/96		0.5 U	1 U	1 U	1 U		1 U	1 U	1.1	1 U	1 U			26	1 U	1 U	1 U	3.9		1 U	1 U	1 U	1.2	1 U	1 U		19	1 U	1 U
	01/14/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1.1	1 U	1 U			23	1 U	1 U	1 U	5.1		1 U	1 U	1 U	1 U	1 U	1 U		20	1 U	1 U
	04/16/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			17	1 U	1 U	1 U	3.3		1 U	1 U	1 U	1.1	1 U	1 U		14	1 U	1 U
	07/09/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			9.8	1.2	1 U	1 U	2.4		1 U	1 U	1 U	2.7	1 U	1 U		11	1 U	1 U
	10/16/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			19	1 U	1 U	1 U	3.8		1 U	1 U	1 U	1.8	1 U	1 U		13	1 U	1 U
	01/14/98		0.5 U	1 U	1.8	1.9		1 U	1 U	1 U	1 U	1 U			11	1 U	1 U	1 U	2.9		1 U	1 U	1 U	1.8	1 U	1 U		14	1 U	1 U
	04/22/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			8.1	1 U	1 U	1 U	2.3		1 U	1 U	1 U	1.2	1 U	1 U		11	1 U	1 U
	07/15/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			8.8	1 U	1 U	1 U	1.8		1 U	1 U	1 U	1.2	1 U	1 U		8.2	1 U	1 U
	10/20/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			9.3	1 U	1 U	1 U	1.8		1 U	1 U	1 U	1 U	1 U	1 U		8.8	1 U	1 U
	01/15/99		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			7.3	1 U	1 U	1 U	1.5		1 U	1 U	1 U	1 U	1 U	1 U		10	1 U	1 U
	04/15/99		1 U	1 U	2.9	1.7		1 U	1 U	1 U	2 U	2 U	1 U		2.7	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.5	1 U	1 U		7	2 U	2 U
	07/15/99		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		2	1 U	1 U	1 U	1 U		1 U	1 U	1 U	6.3	1 U	1 U		5.2	2 U	2 U
	10/15/99		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1.4	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2	1 U	1 U		4.5	2 U	2 U
	01/27/00		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		4.2	2 U	2 U
	04/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		8	1 U	1 U	1 U	17		1 U	1 U	1 U	2.5	1 U	1 U		8.8	2 U	2 U
	10/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		8.8	1 U	1 U	1 U	17		1 U	1 U	1 U	1.8	1 U	1 U		7.4	2 U	2 U
	04/15/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1.8		30	1 U	1 U	1 U	4.6		1 U	1 U	1 U	1.8	1 U	1 U		19	2 U	2 U
	07/18/01		1 U	1 U	1 U	1 U		1 U	1 U	2.4	2 U	2 U	4.4		68	1 U	1 U	1 U	13		1 U	1.1	1 U	2.7	1 U	1 U		44	2 U	2 U
	10/17/01		1 U	1 U	1 U	1 U		1 U	1 U	1.1	2 U	2 U	1.7		25	1 U	1 U	1 U	6.2		1 U	1 U	1 U	2	1 U	1 U		22	2 U	2 U
	01/16/02		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.7	1 U	1 U		3.5	2 U	2 U
	04/17/02		2 U	2 U	2 U	4 U		2 U	2 U	4.4	4 U	4 U	7.3		93	2 U	2 U	2 U	10		2 U	2 U	2 U	3.6	2 U	2 U		71	4 U	4 U
	07/25/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		8.1	1 U	1 U	1 U	1.8		1 U	1 U	1 U	1.3	1 U	1 U		7.1	2 U	2 U
	10/23/02		1 U	1 U	1 U	2 U		1 U	1 U	1.3	2 U	2 U	1.9		33	1 U	1 U	1 U	11		1 U	1 U	1 U	2.8	1 U	1 U		38	2 U	2 U
	01/09/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1.8	1 U	1 U	2.8	1 U	40	0.5 U	1 U	1 U	11	5 U	5 U	1 U	1 U	2.6	1 U	1 U	1 U	42	1 U	0.5 U
	04/24/03		1.7	1 U	1 U	2 U	1 U	1 U	0.5 U	7	1 U	1 U	13	1 U	150	0.5 U	1 U	1 U	37	5 U	5 U	2.2	1 U	5.3	2.9	1 U	1 U	110	1 U	0.5 U
	07/30/03		2.2	4 U	4 U	8 U	4 U	4 U	2 U	9.2	4 U	4 U	16	4 U	230	2 U	4 U	4 U	47	20 U	20 U	4 U	4 U	8.6	4	4 U	4 U	150	4 U	2 U
	10/21/03		17	4 U	4 U	8 U	4 U	4 U	2 U	8.9	4 U	5.3	13	4 U	210	2 U	4 U	4 U	26	20 U	20 U	4 U	4 U	5.3	4 U	4 U	4 U	130	4 U	2 U
	01/22/04		3.3	2 U	2 U	4 U	2 U	2 U	1 U	4	2 U	2 U	7.7	2 U	90	1 U	2 U	2 U	17	10 U	10 U	2 U	2 U	2.9	2 U	2 U	2 U	63	2 U	1 U
	04/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1.3	1 U	16	0.5 U	1 U	1 U	2	5 U	5 U	1 U	1 U	1.8	1 U	1 U	1 U	20	1 U	0.5 U
	07/21/04		5.2	1 U	1 U	2 U	1 U	1 U	0.5 U	8.4	1 U	1 U	15	1 U	180	0.5 U	1 U	1 U	34	5 U	5 U	3.1	1 U	6	3.4	1 U	1 U	130	1 U	0.5 U
	10/12/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1.1	1 U	7.4	0.5 U	1 U	1 U	4.4	5 U	5 U	1 U	1 U	18	1 U	1 U	1 U	58	7.3	0.5 U
MW-05	01/15/99		0.9	0.5 U	0.5 U			0.2 U	5.8	7.4	0.2 U	0.2 U			0.2 U	29	0.2 U	0.2 U	0.2 U	0.2 U	2.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		5.9	0.2 U	0.2 U
	04/16/99		1 U	1 U	1 U	1 U		1 U	140	73	1 U	1 U			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		35	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Non-chlorinated: Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chlorinated: Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-05	07/15/89		0.7 U	1 U	1 U	1 U		1 U	97	57	1 U	1 U			4	1 U	1 U	1 U	2		1 U	1 U	1 U	2	1 U	1 U		48	1 U	1 U
	07/15/89	K	7 U	10 U	10 U	10 U		10 U	180	70	10 U	10 U			10 U	10 U	10 U	10 U	10 U		20	10 U	10 U	10 U	10 U	10 U		80	10 U	10 U
	10/15/89		0.6	1 U	1 U	1 U		1 U	38	31	1 U	1 U			10	10	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		15	1 U	1 U
	01/25/90		1 U	1 U	1 U	2 U		1 U	52	42	0.4 U	0.4 U			0.42	2.2	1 U	1 U	0.4 U	0.4 U	4 U		0.4 U	0.4 U	0.41	0.4 U		18	4 U	0.4 U
	04/10/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	120	76	1 U	1 U			1 U	1 U	2.5 U	2.5 U	4.7	1 U	10 U		1 U	1 U	1 U	1 U		24	10 U	1 U
	07/15/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	120	41	1 U	1 U	1 U		3.2	1 U	2.5 U	2.5 U	2.1	1 U	10 U	1 U	1 U	1.4	1.9	1 U		51	10 U	1 U
	10/15/90		0.5 U	1 U	1 U	1 U		10 U	70	33	10 U	10 U			10 U	10 U	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U		14	10 U	10 U
	01/15/91		0.5 U	1 U	1 U	1 U			140	48					1 U	1 U			1 U		1 U		1 U	1 U				22		
MW-06B	01/15/89		0.5 U	0.5 U	0.5 U			0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1	0.2 U	0.2 U		57	0.2 U	0.2 U
	04/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	3	1 U	1 U		37	1 U	1 U
	07/16/89		0.7 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	8	1 U	1 U		29	1 U	1 U
	10/16/89		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		29	1 U	1 U
	01/24/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	1 U	1 U	1 U			1 U	1 U	2.5 U	2.5 U	1 U	1 U	10 U		1 U	8.4	1 U	1 U		48	10 U	1 U
	04/12/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	1 U	1 U	1 U			1 U	1 U	2.5 U	2.5 U	1 U	1 U	10 U		1 U	5	1 U	1 U		61	10 U	1 U
	07/15/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	2.5 U	2.5 U	1.5	1 U	10 U	1 U	1 U	7.9	1 U	1 U		51	10 U	1 U
	10/15/90		0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	10 U	10 U		10 U	5 U	5 U	10 U	10 U	5 U	20 U	5 U	5 U	5 U	10	5 U	5 U	10 U	52	5 U	10 U
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U					1 U	1 U			1 U		1 U		1 U	13				59		
	04/15/92		0.5 U	0.5 U	1.1	0.82	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2	0.5 U	0.5 U	0.5 U	19	0.5 U	0.5 U
	07/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.4	1 U	1 U	1 U	1 U	1 U		10	1 U	1 U
	10/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.4	1 U	1 U	1 U	1 U	1 U		9.3	1 U	1 U
	01/15/93		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		6.9	1 U	1 U
	04/21/93		0.5 U	64	26	88		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		14 B	1 U	1 U	1 U	1 U	1 U		2.6	1 U	1 U
	07/13/93		0.5 U	2.2	2	5.5		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		11 B	1 U	1 U	1 U	1 U	1 U		2.7	1 U	1 U
	10/13/93		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.6 B	1 U	1 U	1 U	1 U	1 U		5.8	1 U	1 U
	01/11/94		0.5 U	1 U	1 U	1 U		1 U	1.2	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.7	1 U	1 U
	04/12/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2	1 U	1 U
	07/19/94		0.5 U	1.1	1 U	1.9		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.9	1 U	1 U
	10/12/94		0.5 U	1.5	1 U	8.2		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.5	1 U	1 U
	01/17/95		1 U	110	80	110		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	4.7	1 U	1 U		8.8	1 U	1 U
	04/18/95		0.5 U	1.6	9.1	8.2		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		3.2 B	1 U	1 U	3.3	1 U	1 U		2.3	1 U	1 U
	07/11/95		0.5 U	1.1	4	6.1		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.6	1 U	1 U		6.6	1 U	1 U
	10/10/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.6	1 U	1 U
	01/30/96		1 U	28	27	53		1 U	1 U	1 U	1 U	1 U			1.6	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		14	1 U	1 U
	04/16/96		1 U	4.2	37	50		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.9	1 U	1 U
	07/16/96		0.5 U	1 U	2.3	3.5		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.3	1 U	1 U
	10/08/96		0.5 U	1 U	2.1	2.6		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		9.1	1 U	1 U
	01/14/97		0.5 U	4.3	4.3	8.4		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5	1 U	1 U
	04/16/97		0.5 U	3.6	1.7	1 U		1 U	1 U	1 J	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.3	1 U	1 U		5.2	1 U	1 U
	07/09/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.9	1 U	1 U		6.6	1 U	1 U
	10/15/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.6	1 U	1 U		6.4	1 U	1 U
	01/14/98		0.5 U	15	32	39		1 U	1 U	1 U	1 U	1 U			1.7	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		17	1 U	1 U
	04/22/98		0.5 U	1.6	4.2	6		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		7.7	1 U	1 U

Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro-benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated						Chlorinated																					
MW-06B	07/15/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		4.3	1 U	1 U
	10/20/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1.1	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		9.9	1 U	1 U
	01/15/99		0.5 U	5	24	29		1 U	1 U	1 U	1 U	1 U			1.3	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		17	1 U	1 U
	04/15/99		1 U	19	42	33.9		1 U	1 U	1 U	2 U	2 U	1 U		2.3	1 U	1 U	1 U	1.5		1 U	1 U	1 U	1.8	1 U	1 U		31	2 U	2 U
	07/15/99		1 U	1 U	1.2	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	8.1	1 U	1 U		9.2	2 U	2 U
	10/15/99		1 U	1 U	4.9	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1.5	1 U	1 U	1 U	1.8		1 U	1 U	1 U	1.9	1 U	1 U		12	2 U	2 U
	01/25/00		1 U	1 U	2	2 U		1 U	1 U	1 U	2 U	2 U	1 U		2	1 U	1 U	1 U	2.4		1 U	1 U	1 U	17	1 U	1 U		13	2 U	2 U
	04/15/00		1 U	1 U	1.1	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1.1		1 U	1 U	1 U	1	1 U	1 U		7	2 U	2 U
	10/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.3	1 U	1 U		6.2	2 U	2 U
	04/15/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5.9	2 U	2 U
	07/18/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.7	2 U	2 U
	10/17/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		4.8	2 U	2 U
	01/16/02		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5.1	2 U	2 U
	04/17/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.1	2 U	2 U
	07/25/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		6	2 U	2 U
	10/23/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	3.4		11	1.8	1 U	1 U	1.1		1 U	1 U	1 U	1 U	1 U	1 U		12	2 U	2 U
	01/09/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.5	0.5 U	1 U	1 U	2	5 U	5 U	1 U	1 U	5.9	1 U	1 U	1 U	22	1 U	0.5 U
	04/24/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.8	1 U	1 U	1 U	15	1 U	0.5 U
	07/30/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.2	1 U	1 U	1 U	13	1 U	0.5 U
	10/22/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	4.4	1 U	1 U	1 U	18	1 U	0.5 U
	01/22/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5.9	0.5 U	1 U	1 U	7.8	5 U	5 U	1 U	1 U	3.5	1 U	1 U	1 U	18	1 U	0.5 U
	04/20/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.8	0.5 U	1 U	1 U	2.1	5 U	5 U	1 U	1 U	21	1 U	1 U	1 U	15	1 U	0.5 U
	07/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	11	0.85	1 U	1 U	13	5 U	5 U	1 U	1 U	75	1 U	1 U	1 U	28	1.5	0.5 U
	10/13/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	4.5	1.7	1 U	1 U	6.2	5 U	5 U	1 U	1 U	100	1 U	1 U	1 U	53	4.7	0.5 U
MW-08D	10/15/00		0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	10 U	10 U		10 U	5 U	5 U	10 U	10 U	5 U	20 U	5 U	5 U	5 U	14	5 U	5 U	10 U	100	5 U	10 U
	01/15/01		0.5 U	1 U	1 U	1 U			1 U	1 U					1 U	1 U			1 U		1 U		1 U	20				78		
	04/15/02		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.4	0.5 U	0.5 U
	07/15/02		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.4	1 U	1 U	1 U	1 U	1 U		1.9	1 U	1 U
	10/15/02		0.5 U	12	2.8	13		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.4	1 U	1 U	1 U	1 U	1 U		6.1	1 U	1 U
	01/15/03		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.7	1 U	1 U
	04/21/03		0.5 U	24	13	32		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.9 B	1 U	1 U	1 U	1 U	1 U		2.6	1 U	1 U
	07/13/03		0.5 U	2.2	2	8.2		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		2.6 B	1 U	1 U	1 U	1 U	1 U		4.6	1 U	1 U
	10/13/03		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		3.6 B	1 U	1 U	1.5	1 U	1 U		9.4	1 U	1 U
	01/11/04		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.9	1 U	1 U
	04/12/04		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2	1 U	1 U
	07/19/04		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2	1 U	1 U
	10/12/04		0.5 U	1.6	1 U	11		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.1	1 U	1 U
	01/18/05		0.5 U	16	22	38		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.9	1 U	1 U
	04/18/05		0.5 U	1 U	3.4	25		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		2.4 B	1 U	1 U	6.6	1 U	1 U		1.6	1 U	1 U
	07/11/05		0.5 U	1.1	3.4	5.1		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		4.3	1 U	1 U
	10/10/05		0.5 U	1 U	1.3	2.6		1 U	3.1	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		5.2	1 U	1 U
	01/30/06		0.5 U	9.3	13	28		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		8.3	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated												Chlorinated															
MW-06D	04/16/96		2.5 U	9.7	67	68		1 U	1 U	1 U	1 U	1 U			1 U	1.4	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5.9	1 U	1 U
	07/16/96		0.5 U	1 U	3.1	4.6		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.9	1 U	1 U
	10/08/96		0.5 U	1.7	4.3	3.9		1 U	1 U	1 U	1 U	1 U			2.8	1 U	1 U	1 U	1.2		1 U	1 U	1 U	1 U	1 U	1 U		32	1 U	1 U
	01/14/97		0.5 U	6.4	16	19		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		17	1 U	1 U
	04/16/97		0.5 U	3.5	3.7	1.3		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3.7	1 U	1 U		14	1 U	1 U
	07/09/97		0.5 U	1 U	1.1	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3.7	1 U	1 U		14	1 U	1 U
	10/15/97		0.5 U	1 U	1.1	1 U		1 U	1 U	1 U	1 U	1 U			1.1	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.1	1 U	1 U		14	1 U	1 U
	01/14/98		0.5 U	3.9	12	15		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.5	1 U	1 U		8.7	1 U	1 U
	04/22/98		0.5 U	1 U	2.4	4.4		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		8.2	1 U	1 U
	07/15/98		0.5 U	1 U	1.2	1		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		8.1	1 U	1 U
	10/20/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5.4	1 U	1 U
	01/15/99		0.5 U	1.2	5.8	6.4		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		7.1	1 U	1 U
	04/15/99		1 U	4	14	11.5		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		10	2 U	2 U
	07/15/99		1 U	1 U	4.4	1 U		1 U	1 U	1 U	2 U	2 U	1 U		2.6	1 U	1 U	1 U	1.8		1 U	1 U	1 U	16	1 U	1 U		23	2 U	2 U
	10/15/99		1 U	1 U	2.9	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		8.8	2 U	2 U
	01/25/00		1 U	1 U	1.8	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	16	1 U	1 U		9.2	2 U	2 U
	04/15/00		1 U	1 U	1	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1	1 U	1 U		4.3	2 U	2 U
	10/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1	1 U	1 U		10	2 U	2 U
	04/15/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.5	1 U	1 U		10	2 U	2 U
	07/18/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.4	2 U	2 U
	10/17/01		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		4.6	2 U	2 U
	01/16/02		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		6.8	2 U	2 U
	04/17/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.5	2 U	2 U
	07/25/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.9	2 U	2 U
	10/23/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		4.5	2 U	2 U
	01/08/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1	1 U	1 U	1 U	6.3	1 U	0.5 U
	04/24/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.9	1 U	1 U	1 U	8.8	1 U	0.6 U
	07/30/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	4.1	1 U	0.5 U
	10/22/03		0.5 U	1 U	1.8	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.6	1 U	1 U	1 U	7	1 U	0.5 U
	01/22/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	12	1 U	1 U	1 U	22	1 U	0.5 U
	04/20/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	6.1	1 U	1 U	1 U	16	1 U	0.5 U
	07/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.6 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	18	1 U	1 U	1 U	28	1.4	0.5 U
	10/12/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	21	5 U	5 U	1 U	1 U	31	1 U	1 U	1 U	53	5.4	0.5 U
MW-07	01/15/89							0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			2.8	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	22	0.2 U	0.2 U	21	0.2 U	0.2 U		35	0.2 U	0.2 U
	04/15/89		1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			4	1 U	1 U	1 U	1 U	1 U	1 U	2	1 U	2	1 U	1 U		47	1 U	1 U
	04/15/89	K	5 U	5 U	5 U	5 U		5 U	5 U	13 U	5 U	5 U		5 U	6.3 U	5 U	5 U	5 U	15 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U		41 U	5 U	5 U
	07/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			15	1 U	1 U	1 U	1 U		1 U	3	1 U	1 U	1 U	1 U		25	1 U	1 U
	10/15/89		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			4	1 U	1 U	1 U	1 U		1 U	2		3	1 U	1 U		44	1 U	1 U
	01/24/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	1 U	1 U	1 U			2.4	1 U	2.5 U	2.5 U	1 U	1 U	10 U		1 U	1 U	1 U	1 U		39	10 U	1 U
	04/12/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	1 U	1 U	1 U			3.7	1 U	2.5 U	2.5 U	1 U	1 U	10 U		1 U	1 U	1 U	1 U		45	10 U	1 U
	07/15/90		1 U	1 U	1 U	2 U		1 U	0.4 U	0.73	0.4 U	0.4 U	2.4		29	3.4	1 U	1 U	3.5	0.4 U	4 U	0.4 U	0.4 U	1.1	0.4 U	0.4 U		34	4 U	0.4 U
	10/15/90		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			9	6	1 U	1 U	1.3		1 U	3.6	1 U	1.4	1 U	1 U		19	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Non-chlorinated					Chlorinated																							
			Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-07	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U					20	1 U			3		1 U		1 U	1 U				1.8		
	04/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			29	1 U	1 U	1 U	2		5.5	1 U	1 U	1 U	1 U	1 U		30	1 U	1 U
	07/15/91		0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	5 U	5 U			30	31	5 U	5 U	5 U		18	5 U	5 U	5 U	5 U	5 U		53	5 U	5 U
	10/23/91		5 U	5 U	5 U	10 U		5 U	2 U	2 U	2 U	2 U	4		18	18	5 U	5 U	2 U	10 U	20 U	2 U	2 U	2 U	2 U	2 U		54	20 U	2 U
	01/15/92		1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	9		49	56	1 U	1 U	9.9		1 U	1 U	1 U	1 U	1 U	1 U		120	1 U	1 U
	04/15/92		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.97	0.5 U	0.5 U	4.4	0.5 U	32	73	0.5 U	0.5 U	5.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	56	0.5 U	0.5 U
	07/15/92		1 U	2 U	2 U	2 U		2 U	2 U	2 U	2 U	2 U			12	17	2 U	2 U	2.3		2 U	2 U	2 U	2 U	2 U	2 U		53	2 U	2 U
	10/15/92		0.5 U	1 U	1 U	1 U		2 U	1 U	2.2	2 U	2 U			22	48	2 U	2 U	4.6		7	1 U	2 U	1 U	1 U	2 U		98	2 U	2 U
	01/15/93		0.5 U	1 U	1 U	1 U		2 U	2 U	2 U	2 U	2 U			28	67	2 U	2 U	4.8		2 U	2 U	2 U	2 U	2 U	2 U		73	2 U	2 U
	04/22/93		1.2 U	2.5 U	80	5.6		1.1	1 U	1 U	1 U	1 U			9	17	1 U	1 U	2.7		13 B	1 U	1 U	1 U	1 U	1 U		23	1 U	1 U
	07/13/93		5 U	10 U	210	10 U		1 U	1 U	1 U	1 U	1 U			23	7.9	1 U	1 U	8.7		12 B	1 U	1 U	1 U	1 U	1 U		43	1 U	1 U
	10/13/93		0.82	1 U	7.2	1 U		2 U	2 U	2 U	2 U	2 U			19	4.9	2 U	2 U	6.8		2 U	2 U	2 U	2 U	2 U	2 U		44	2 U	2 U
	01/11/94		1.4	1 U	33	1 U		2 U	2 U	2 U	2 U	2 U			38	8.8	2 U	2 U	6.7		2 U	2 U	2 U	2 U	2 U	2 U		53	2 U	2 U
	04/12/94		2.5 U	5 U	200	5 U		5 U	5 U	5 U	5 U	5 U			67	20	5 U	5 U	15		5 U	5 U	5 U	5 U	5 U	5 U		98	5 U	5 U
	07/19/94		0.88	1 U	7.7	1.2		5 U	5 U	5 U	5 U	5 U			57	7	5 U	5 U	8.5		5 U	5 U	5 U	5 U	5 U	5 U		140	5 U	5 U
	10/12/94		0.5 U	1 U	5.1	5.5		2 U	2 U	2 U	2 U	2 U			28	7.8	2 U	2 U	4.5		2 U	2 U	2 U	2 U	2 U	2 U		98	2 U	2 U
	01/18/95		0.5 U	7	8.7	10		10 U	10 U	10 U	10 U	10 U			43	10 U	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U		170	10 U	10 U
	04/18/95		0.5 U	1 U	1.3	1 U		1 U	1 U	1.1	1 U	1 U			19	29	1 U	1 U	1.5		3.2 B	1 U	1 U	1 U	1 U	1 U		28	1 U	1 U
	07/11/95		0.5 U	1 U	2.1	3.4		2 U	2 U	2 U	2 U	2 U			65	24	2 U	2 U	5.7		2 U	2.3	2 U	2 U	2 U	2 U		53	2 U	2 U
	10/10/95		0.74	1 U	3.8	1.4		10 U	10 U	10 U	10 U	10 U			78	22	10 U	10 U	11		10 U	10 U	10 U	10 U	10 U	10 U		98	10 U	10 U
	01/31/96		1	4.2	4.8	10		5 U	5 U	5 U	5 U	5 U			47	13	5 U	5 U	6.8		5 U	5 U	5 U	5 U	5 U	5 U		86	5 U	5 U
	04/16/96		0.5 U	1.3	11	14		2 U	2 U	2 U	2 U	2 U			34	41	2 U	2 U	3.4		2 U	2 U	2 U	2 U	2 U	2 U		37	2 U	2 U
	07/16/96		1	1 U	1.8	2.7		10 U	10 U	10 U	10 U	10 U			93	35	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U		87	10 U	10 U
	10/08/96		0.98	1 U	1.4	1.5		5 U	5 U	5 U	5 U	5 U			74	32	5 U	5 U	8.9		5 U	5.1	5 U	5 U	5 U	5 U		150	5 U	5 U
	01/14/97		0.5 U	1 U	1.7	2.8		1 U	1 U	1.2	1 U	1 U			31	30	1 U	1 U	7.5		1 U	2.8	1 U	1 U	1 U	1 U		95	1 U	1 U
	04/18/97		0.5 U	1.1	1.2	1 U		1 U	1 U	1.7	1 U	1 U			64	65	1 U	1 U	8.5		1 U	2.8	1 U	2.8	1 U	1 U		63	1 U	1 U
	07/09/97		0.56	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			81	79	1 U	1 U	9.1		1 U	1.7	1 U	2.3	1 U	1 U		54	1 U	1 U
	10/15/97		0.5 U	1 U	1 U	1 U		1 U	1 U	1.4	1 U	1 U			57	65	1 U	1 U	12		1 U	3.3	1 U	1.4	1 U	1 U		65	1 U	1 U
	01/14/98		0.5 U	2.2	5.2	8.8		1 U	1 U	1.8	1 U	1 U			38	24	1 U	1 U	10		1 U	1 U	1 U	1 U	1 U	1 U		97	1 U	1 U
	04/22/98		0.5 U	1 U	1.8	1.8		1 U	1 U	1 U	1 U	1 U			21	18	1 U	1 U	3.8		1 U	1 U	1 U	1.2	1 U	1 U		23	1 U	1 U
	07/15/98		0.5 U	1 U	1 U	1 U		1 U	1 U	1	1 U	1 U			41	32	1 U	1 U	5.9		1 U	1.8	1 U	1 U	1 U	1 U		53	1 U	1 U
	10/20/98		0.88	1 U	1 U	1 U		1 U	3	1.4	1 U	1 U			70	41	1 U	1 U	13		1 U	4.3	1 U	1 U	1 U	1 U		88	1 U	1 U
	01/15/99		1.2 U	2.5 U	2.5 U	2.5 U		2.5 U	2.5 U	3	2.5 U	2.5 U			74	24	2.5 U	2.5 U	16		2.5 U	5.3	2.5 U	2.5 U	2.5 U	2.5 U		160	2.5 U	2.5 U
	04/15/99		2 U	3	11	6.8		2 U	2 U	2 U	4 U	4 U	22		33	9.7	2 U	2 U	8.4		2 U	2.7	2 U	2 U	2 U	2 U		80	4 U	4 U
	07/15/99		1 U	1 U	1.3	1 U		1 U	1 U	1.4	2 U	2 U	21		53	16	1 U	1 U	9.4		1 U	2.8	1 U	14	1 U	1 U		45	2 U	2 U
	10/15/99		2 U	2 U	2 U	4 U		2 U	2 U	2.7	4 U	4 U	35		71	7	2 U	2 U	18		2 U	5.7	2 U	2 U	2 U	2 U		130	4 U	4 U
	01/25/00		1 U	1 U	1 U	2 U		1 U	1 U	1.1	2 U	2 U	13		28	2.2	1 U	1 U	9.1		1 U	2.3	1 U	8.8	1 U	1 U		47	2 U	2 U
	04/15/00		1 U	1 U	1.2	1 U		1 U	1 U	1.1	2 U	2 U	13		41	5.8	1 U	1 U	8.2		1 U	1.6	1 U	1.4	1 U	1 U		48	2 U	2 U
	10/15/00		2.5 U	2.5 U	2.5 U	2.5 U		2.5 U	2.5 U	2.5 U	5 U	5 U	27		64	29	2.5 U	2.5 U	13		2.5 U	3.8	2.5 U	2.5 U	2.5 U	2.5 U		110	5 U	5 U
	04/15/01		1 U	1 U	1 U	1 U		1 U	1 U	1.2	2 U	2 U	23		53	41	1 U	1 U	8.9		1 U	2.9	1 U	1 U	1 U	1 U		78	2 U	2 U
	07/18/01		2.5 U	2.5 U	2.5 U	2.5 U		2.5 U	2.5 U	2.5 U	5 U	5 U	31		76	140	2.5 U	2.5 U	13		2.5 U	2.7	2.5 U	2.5 U	2.5 U	2.5 U		94	5 U	5 U
	10/18/01		2 U	2 U	2 U	2 U		2 U	2 U	2.8	4 U	4 U	38		78	27	2 U	2 U	18		2 U	4.8	2 U	2 U	2 U	2 U		180	4 U	4 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated						Chlorinated																					
MW-07	01/17/02		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	2.1		8.7	15	1 U	1 U	1.2		1 U	1 U	1 U	1.4	1 U	1 U		15	2 U	2 U
	04/18/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	7.9		34	52	1 U	1 U	4.1		1 U	1.1	1 U	1 U	1 U	1 U		38	2 U	2 U
	07/26/02		2.5 U	2.5 U	2.5 U	6 U		2.5 U	2.5 U	2.5 U	5 U	5 U	24		58	15	2.5 U	2.5 U	11		2.5 U	3.4	2.5 U	2.5 U	2.5 U	2.5 U		100	5 U	6 U
	10/23/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3.8	1 U	1 U	10 U	21	2 U	2 U
	12/30/02		0.057 J	1 U	1 U	2 U		1 U	1 U	0.29 J	1 U	1 U	3	1 U	13	1.8	1 U	1 U	1.8	0.09 J	0.6 J	0.38 J	1 U	1	1 U	1 U		13	1 U	0.12 J
	04/24/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1.8	1 U	1 U	13	1 U	48	18	1 U	1 U	7.4	5 U	5 U	1.1	1 U	1.7	1 U	1 U	1 U	59	1 U	0.6 U
	07/30/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1.6	1 U	1 U	18	1 U	52	20	1 U	1 U	8.5	5 U	5 U	1.7	1 U	1.7	1 U	1 U	1 U	60	1 U	0.5 U
	10/23/03		2 U	2 U	2 U	4 U		2 U	6 U	2 U	5 U	5 U	2 U		5.8	3.3	2 U	2 U	5 U	5 U	5 U	2 U	2 U	2 U	2 U	2 U	9.9 U	11	5 U	6 U
	01/22/04		0.6 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	8.2	1 U	24	5.3	1 U	1 U	2.3	5 U	5 U	1 U	1 U	1.7	1 U	1 U	1 U	32	1 U	0.5 U
	04/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	4.4 *	1 U	14	3.4	1 U	1 U	1.4	5 U	5 U	1 U	1 U	2.2	1 U	1 U	1 U	28	1 U	0.5 U
	07/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1.1	1 U	5	0.63	1 U	1 U	1 U	5 U	5 U	1 U	1 U	3.6	1 U	1 U	1 U	16	1 U	0.5 U
	10/12/04		2 U	2 U	2 U	4 U		2 U	5 U	2 U	5 U	5 U	2 U		8.5	2 U	2 U	2 U	5 U	5 U	5 U	2 U	2 U	13	2 U	2 U	9.5 U	12	6 U	6 U
MW-08	01/15/89							0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			30	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4.3	0.2 U	0.2 U		88	0.2 U	0.2 U
	04/15/89		1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			38	1 U	1 U	1 U	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U		23	1 U	1 U
	07/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	3	1 U	1 U			74	10	1 U	1 U	14		1 U	16	1 U	2	1 U	1 U		43	1 U	1 U
	10/15/89		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			40	1 U	1 U	1 U	4		1 U	8		1	1 U	1 U		22	1 U	1 U
	01/23/90		0.6 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.40	0.2 U	0.2 U			29	0.83	0.5 U	0.6 U	6.8	0.2 U	2 U		0.2 U	1.4	0.2 U	0.2 U		28	2 U	0.2 U
	04/13/90		1 U	1 U	1 U	2 U		1 U	0.4 U	0.4 U	0.4 U	0.4 U			28	0.8	1 U	1 U	2.7	0.4 U	4 U		0.4 U	1	0.4 U	0.4 U		17	4 U	0.4 U
	07/15/90		1 U	1 U	1 U	2 U		1 U	0.4 U	1	0.4 U	0.4 U	5.9		42	17	1 U	1 U	7.7	0.4 U	4 U	0.92	0.4 U	0.4 U	0.4 U	0.4 U		20	4 U	0.4 U
	10/15/90		0.5 U	1 U	1 U	1 U		10 U	10 U	10 U	10 U	10 U			34	14	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U		14	10 U	10 U
	01/15/91		0.5 U	3	1.7	4.4			1 U	1 U					58	30			6		1 U		1 U	1 U				28		
MW-09	01/15/89		0.5 U	0.5 U	0.5 U			0.2 U	0.2 U	8.9	0.2 U	0.2 U			34	4.3	0.2 U	0.2 U	0.2 U	0.2 U	16	0.2 U	0.2 U	3.1	2.9	0.2 U		55	0.2 U	0.2 U
	04/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			5	8	1 U	1 U	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U		24	1 U	1 U
	07/15/89		0.7 U	1 U	1 U	1 U		1 U	1 U	4	1 U	1 U			28	37	1 U	1 U	14		3	3	1 U	2	4	1 U		57	1 U	1 U
	10/15/89		0.5 U	1 U	1 U	1 U		10 U	10 U	10 U	10 U	10 U			80	10 U	10 U	10 U	40		15	10 U	10 U	10 U	10 U	10 U		110	10 U	10 U
	01/23/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	1 U	1 U	8.1			56	3.9	2.5 U	2.5 U	38	1 U	10 U		1 U	2.2	1 U	1 U		100	10 U	1 U
	04/13/90		2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	13	1 U	1 U			88	15	2.5 U	2.5 U	48	1 U	10 U		1 U	2	4	1 U		150	10 U	1 U
	07/15/90		2.5 U	2.5 U	2.5 U	6 U		2.5 U	1 U	3.7	1 U	1 U	1 U		23	50	2.5 U	2.5 U	12	1 U	10 U	1 U	1 U	1 U	4	1 U		84	10 U	1 U
	07/15/90	K	2.5 U	2.5 U	2.5 U	5 U		2.5 U	1 U	6.4	1 U	1 U	1 U		35	81	2.5 U	2.5 U	17	1 U	10 U	1 U	1 U	1 U	5	1 U		84	10 U	1 U
	10/15/90		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			6.5	7.8	1 U	1 U	4.4		1 U	1 U	1 U	1 U	1 U	1 U		17	1 U	1 U
	01/15/91		0.5 U	6.6	14	9			1 U	1 U					14	30			7		1 U		1 U	1 U				28		
	04/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1.8	1 U	1 U			8.4	34	1 U	1 U	3.7		2.1 B	1 U	1 U	1 U	1.8	1 U		26	1 U	1 U
	07/15/91		0.5 U	1 U	98	1 U		5 U	5 U	5 U	5 U	5 U			17	120	5 U	5 U	5 U		15	5 U	5 U	5 U	5 U	5 U		41	5 U	5 U
	10/22/91		10 U	10 U	94	20 U		10 U	4 U	10	4 U	4 U	4 U		51	100	10 U	10 U	20	20 U	40 U	4 U	4 U	4 U	4 U	4 U		120	40 U	4 U
	01/15/92		50 U	50 U	1220	92		5 U	1 U	1 U	5 U	5 U	1 U		16	79	5 U	5 U	6		1 U	5 U	5 U	1 U	1 U	5 U		45	5 U	5 U
	04/15/92		25 U	2800	3800	6190	31	25 U	25 U	25 U	25 U	25 U	25 U	25 U	31	25 U	25 U	25 U	25 U	25 U	48	25 U	25 U	25 U	25 U	25 U	25 U	52	25 U	25 U
	07/15/92		500 U	33000	7900	25000		1000 U	1000 U	1000 U	1000 U	1000 U			1000 U	1000 U	1000 U	1000 U	1000 U		1800	1000 U	1000 U	1000 U	1000 U	1000 U		1000 U	1000 U	1000 U
	10/15/92		0.5 U	83000	13000	58000		1000 U	1 U	1 U	1000 U	1000 U			1 U	1 U	1000 U	1000 U	1 U		1400	1 U	1000 U	1 U	1 U	1000 U		1 U	1000 U	1000 U
	01/15/93		50 U	400	3800	5300		100 U	100 U	100 U	100 U	100 U			100 U	100 U	100 U	100 U	100 U		100 U	100 U	100 U	100 U	100 U	100 U		100 U	100 U	100 U
	01/15/93	K	50 U	400	3800	5300		100 U	100 U	100 U	100 U	100 U			100 U	100 U	100 U	100 U	100 U		100 U	100 U	100 U	100 U	100 U	100 U		100 U	100 U	100 U
	04/20/93		50 U	5100	4000	8200		1 U	1 U	21	1 U	1 U			110	17	1 U	1 U	34		29 B	2.2	1 U	2.7	26	1 U		110	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
Non-chlorinated								Chlorinated																						
MW-09	07/14/93		16 U	33 U	160	74		33 U	33 U	170	33 U	33 U			1200	33 U	33 U	33 U	300		200 B	93	33 U	33 U	310	33 U		1100	33 U	33 U
	10/14/93		2.5 U	5 U	120	45		10 U	10 U	65	10 U	10 U			400	10 U	10 U	10 U	120		41 B	10 U	10 U	10 U	110	10 U		390	10 U	10 U
	01/12/94		10 U	48	290	220		10 U	10 U	46	10 U	10 U			330	10 U	10 U	10 U	91		20 B	10 U	10 U	10 U	90	10 U		230	10 U	10 U
	04/13/94		500 U	17000	12000	32000		5 U	5 U	80	5 U	5 U			220	21	5 U	5 U	71		20 B	5 U	5 U	5 U	53	5 U		270	5 U	5 U
	07/20/94		1000 U	56000	15000	40000		10 U	10 U	52	10 U	10 U			150	13	10 U	10 U	56		10 B	10 U	10 U	10 U	34	10 U		200	10 U	10 U
	10/13/94		500 U	57000	11000	34000		10 U	10 U	170	10 U	10 U			340	30	10 U	10 U	130		25 B	10 U	10 U	10 U	90	10 U		350	10 U	10 U
	01/18/95		250 U	8200	9800	20000		10 U	10 U	82	10 U	10 U			360	30	10 U	10 U	110		25 B	10 U	10 U	10 U	95	10 U		310	10 U	10 U
	04/19/95		50 U	100 U	650	480		100 U	100 U	130	100 U	100 U			850	100 U	100 U	100 U	170		3000 B	100 U	100 U	100 U	200	100 U		670	100 U	100 U
	07/13/95		10 U	80	780	340		50 U	50 U	100	50 U	50 U			410	50 U	50 U	50 U	200		50 U	50 U	50 U	50 U	150	50 U		540	50 U	50 U
	10/11/95		25 U	110	670	1800		25 U	25 U	250	25 U	25 U			410	25 U	25 U	25 U	120		47	25 U	25 U	25 U	74	25 U		320	25 U	25 U
	02/01/96		50 U	100 U	4300	8100		25 U	25 U	120	25 U	25 U			430	78	25 U	25 U	130		44	25 U	25 U	25 U	94	25 U		500	25 U	25 U
	04/17/96		3.3	5.5	24	22		20 U	20 U	83	20 U	20 U			620	23	20 U	20 U	170		23	20 U	20 U	20 U	160	20 U		580	20 U	20 U
	07/17/96		4.6	2 U	42	4.3		50 U	50 U	94	50 U	50 U			590	50 U	50 U	50 U	150		50 U	50 U	50 U	50 U	160	50 U		570	50 U	50 U
	10/09/96		50 U	100 U	2900	350		20 U	20 U	210	20 U	20 U			400	96	20 U	20 U	87		60	20 U	20 U	20 U	55	20 U		470	20 U	20 U
	01/15/97		2.5 U	5 U	5 U	5 U		5 U	5 U	50	5 U	5 U			280	290	5 U	5 U	120		5.8	5 U	5 U	6.8	54	5 U		400	5 U	5 U
	04/17/97		5 U	10 U	18	10 U		10 U	10 U	94	15	10 U			740	34	10 U	10 U	200		18	11	10 U	18	180	10 U		770	10 U	10 U
	07/10/97		25 U	50 U	2500	880		50 U	50 U	110	50 U	50 U			840	50 U	50 U	50 U	240		50 U	50 U	50 U	50 U	210	50 U		850	50 U	50 U
	10/16/97		25 U	150	1800	4800		50 U	50 U	470	50 U	50 U			740	57	50 U	50 U	180		560	50 U	50 U	50 U	57	50 U		800	50 U	50 U
	10/16/97	K	25 U	170	2000	5000		50 U	50 U	540	50 U	50 U			820	58	50 U	50 U	170		810	50 U	50 U	50 U	57	50 U		820	50 U	50 U
	01/15/98		5 U	10 U	690	280		10 U	10 U	63	10 U	10 U			240	200	10 U	10 U	67		20	10 U	10 U	10 U	37	10 U		270	10 U	10 U
	01/15/98	K	5 U	10 U	690	280		10 U	10 U	95	10 U	10 U			230	210	10 U	10 U	65		20	10 U	10 U	10 U	34	10 U		280	10 U	10 U
	04/23/98		5 U	10 U	23	10 U		10 U	10 U	52	14	10 U			480	190	10 U	10 U	160		10 U	10 U	10 U	15	90	10 U		390	10 U	10 U
	04/23/98	K	5 U	10 U	23	10 U		10 U	10 U	52	15	10 U			450	190	10 U	10 U	160		10 U	10 U	10 U	15	91	10 U		380	10 U	10 U
	07/15/98		12 U	25 U	73	25 U		25 U	25 U	150	38	25 U			1200	60	25 U	25 U	380		88	28	25 U	30	220	25 U		1300	25 U	25 U
	07/15/98	K	12 U	25 U	70	25 U		25 U	25 U	150	38	25 U			1100	58	25 U	25 U	380		84	25 U	25 U	27	220	25 U		1300	25 U	25 U
	10/21/98		7.4	12 U	390	12 U		12 U	12 U	630	16	12 U			1200	96	12 U	12 U	270		920	12	12 U	26	180	18		1200	12 U	12 U
	01/15/99		6.2 U	12 U	100	83		12 U	12 U	400	12 U	12 U			480	230	12 U	12 U	100		940	12 U	12 U	12 U	12 U	12 U		560	12 U	12 U
	04/15/99		5 U	5 U	5 U	5 U		5 U	5 U	180	10 U	10 U	16		250	180	5 U	5 U	68		200	5 U	5 U	7	16	5		350	10 U	10 U
	04/15/99	K	5 U	5 U	5 U	5 U		5 U	5 U	110	10 U	10 U	10 U		170	170	5 U	5 U	47		130	5 U	5 U	5 U	8.5	5		250	10 U	10 U
	07/15/99		25 U	25 U	25 U	25 U		25 U	25 U	440	50 U	50 U	50		780	140	25 U	25 U	190		1400	25 U	25 U	25 U	25 U	25 U		810	50 U	50 U
	07/15/99	K	25 U	25 U	25 U	25 U		25 U	25 U	490	50 U	50 U	51		770	120	25 U	25 U	200		1500	25 U	25 U	25 U	45	25 U		860	50 U	50 U
	10/15/99		5 U	5 U	5 U	10 U		5 U	5 U	92	10 U	10 U	7.4		180	85	5 U	5 U	86		250	5 U	5 U	5 U	5 U	5 U		280	10 U	10 U
	10/15/99	K	5 U	5 U	5 U	10 U		5 U	5 U	94	10 U	10 U	8		180	86	5 U	5 U	92		250	5 U	5 U	5 U	5 U	5 U		290	10 U	10 U
	01/28/00		5 U	5 U	5 U	10 U		5 U	5 U	150	10 U	10 U	7		170	38	5 U	5 U	52		300	5 U	5 U	5 U	5 U	5 U		170	10 U	10 U
	01/28/00	K	5 U	5 U	5 U	10 U		5 U	5 U	110	10 U	10 U	5 U		130	31	5 U	5 U	36		270	5 U	5 U	5 U	5 U	5 U		120	10 U	10 U
	04/15/00		5 U	5 U	5 U	5 U		5 U	5 U	57	10 U	10 U	15		240	57	5 U	5 U	110		30	5 U	5 U	7	5 U	5 U		370	10 U	10 U
	04/15/00	K	5 U	5 U	5 U	5 U		5 U	5 U	60	10 U	10 U	17		250	58	5 U	5 U	110		31	5 U	5 U	7.1	5 U	5 U		380	10 U	10 U
	10/15/00		5 U	5 U	29	5 U		5 U	5 U	22	10 U	10 U	11		130	96	5 U	5 U	37		5 U	5 U	5 U	5 U	15	5 U		160	10 U	10 U
	10/15/00	K	5 U	5 U	28	5 U		5 U	5 U	23	10 U	10 U	11		130	89	5 U	5 U	38		5 U	5 U	5 U	5.7	15	5 U		170	10 U	10 U
	04/15/01		5 U	5 U	5 U	5 U		5 U	5 U	29	10 U	10 U	21		150	130	5 U	5 U	52		5.1	5 U	5 U	8.1	19	5 U		200	10 U	10 U
	04/15/01	K	5 U	5 U	5 U	5 U		5 U	5 U	24	10 U	10 U	15		130	110	5 U	5 U	40		5 U	5 U	5 U	6.6	15	5 U		160	10 U	10 U
	07/18/01		5 U	5 U	440	25		5 U	5 U	18	10 U	10 U	11		90	69	5 U	5 U	26		6.8	5 U	5 U	5 U	5 U	5 U		110	10 U	10 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated					Chlorinated																						
MW-09	07/19/01	K	5 U	5 U	380	22		5 U	5 U	19	10 U	10 U	13		110	84	5 U	5 U	33		8.2	5 U	5 U	5 U	9.8	5 U		130	10 U	10 U
	10/18/01		5 U	5 U	8.1	5 U		5 U	5 U	110	10 U	10 U	15		200	240	5 U	5 U	89		69	5 U	5 U	8.5	6.9	5 U		440	10 U	10 U
	10/18/01	K	5 U	5 U	33	5 U		5 U	5 U	65	10 U	10 U	7.6		190	250	5 U	5 U	64		69	5 U	5 U	5 U	5 U	5 U		340	10 U	10 U
	01/17/02		2.5 U	2.5 U	2.5 U	2.5 U		2.5 U	2.5 U	35	5 U	5 U	5.3		89	140	2.5 U	2.5 U	43		14	2.5 U	2.5 U	4.4	3.6	2.5 U		200	5 U	5 U
	01/17/02	K	2.5 U	2.5 U	2.5 U	2.5 U		2.5 U	2.5 U	36	5 U	5 U	5.3		91	150	2.5 U	2.5 U	44		15	2.5 U	2.5 U	4.2	3.8	2.5 U		200	5 U	5 U
	04/18/02		2.5 U	2.5 U	2.5 U	5 U		2.5 U	2.5 U	26	5 U	5 U	11		110	64	2.5 U	2.5 U	33		6.9	2.5 U	2.5 U	4.2	12	2.5 U		140	5 U	5 U
	04/18/02	K	2.5 U	2.5 U	2.5 U	5 U		2.5 U	2.5 U	38	5 U	5 U	16		100	59	2.5 U	2.5 U	40		16	2.5 U	2.5 U	8	30	2.5 U		190	5 U	5 U
	07/26/02		25 U	25 U	25 U	50 U		25 U	25 U	150	50 U	50 U	25 U		320	340	25 U	25 U	89		280	25 U	25 U	25 U	25 U	25 U		480	50 U	50 U
	07/26/02	K	10 U	10 U	10 U	20 U		10 U	10 U	170	20 U	20 U	13		380	380	10 U	10 U	130		320	10 U	10 U	10 U	10 U	10 U		570	20 U	20 U
	10/24/02		10 U	10 U	10 U	20 U		10 U	10 U	300	20 U	20 U	23		530	180	10 U	10 U	140		230	10 U	10 U	10 U	10 U	10 U		530	20 U	20 U
	10/24/02	K	10 U	10 U	10 U	20 U		10 U	10 U	380	20 U	20 U	28		630	210	10 U	10 U	180		270	10 U	10 U	12	10 U	10 U		640	20 U	20 U
	01/08/03		2.5 U	5 U	5 U	10 U	5 U	5 U	2.5 U	150	5 U	5 U	12	5 U	280	100	5 U	5 U	180	25 U	180	5 U	5 U	9.8	5 U	5 U	5 U	380	5 U	2.5 U
	01/08/03	K	2.5 U	5 U	5 U	10 U	5 U	5 U	2.5 U	150	5 U	5 U	11	5 U	280	110	5 U	5 U	180	25 U	170	5 U	5 U	9	5 U	5 U	5 U	380	5 U	2.5 U
	04/25/03		2.5 U	5 U	5 U	10 U	5 U	5 U	2.5 U	80	5 U	5 U	12	5 U	180	180	5 U	5 U	85	25 U	25 U	5 U	5 U	6	5.8	5 U	5 U	240	5 U	2.5 U
	04/25/03	K	2.5 U	5 U	5 U	10 U	5 U	5 U	2.5 U	86	5 U	5 U	13	5 U	200	170	5 U	5 U	58	25 U	25 U	5 U	5 U	5.5	5.8	5 U	5 U	250	5 U	2.5 U
	07/31/03		5 U	10 U	10 U	20 U	10 U	10 U	5 U	180	10 U	10 U	20	10 U	370	330	10 U	10 U	120	50 U	94	10 U	10 U	10 U	10 U	10 U	10 U	480	10 U	5 U
	07/31/03	K	2.5 U	5 U	5 U	10 U	5 U	5 U	2.5 U	170	5 U	5 U	22	5 U	380	310	5 U	5 U	120	25 U	81	5 U	5 U	9	7.2	5 U	5 U	400	5 U	2.5 U
	10/22/03		5 U	10 U	10 U	20 U	10 U	10 U	5 U	74	10 U	10 U	10 U	10 U	130	140	10 U	10 U	38	50 U	180	10 U	10 U	10 U	10 U	10 U	10 U	180	10 U	5 U
	10/22/03	K	1 U	2 U	2 U	4 U	2 U	2 U	1 U	68	2 U	2 U	4.3	2 U	120	140	2 U	2 U	32	10 U	140	2 U	2 U	4.1	2 U	2 U	2 U	130	2 U	1 U
	01/23/04		0.5 U	1 U	1 U	2 U	1 U	1.8	0.5 U	38	1 U	1 U	4.9	1 U	94	26	1 U	1 U	27	5 U	14	1 U	1 U	6.8	1.4	1 U	1 U	95	1 U	0.5 U
	01/23/04	K	0.5 U	1 U	1 U	2 U	1 U	1.7	0.5 U	41	1 U	1 U	5.6	1 U	88	26	1 U	1 U	29	5 U	12	1 U	1 U	5.9	1.7	1 U	1 U	100	1 U	0.5 U
	04/21/04		1 U	2 U	2 U	4 U	2 U	2.1	1 U	73	2 U	2 U	7.7	2 U	200	39	2 U	2 U	62	10 U	71	2 U	2 U	5.4	2 U	2 U	2 U	190	2 U	1 U
	04/21/04	K	1 U	2 U	2 U	4 U	2 U	2.2	1 U	76	2 U	2 U	7.8	2 U	190	28	2 U	2 U	68	10 U	70	2 U	2 U	6.8	2 U	2 U	2 U	230	2 U	1 U
	07/21/04		0.5 U	1 U	1 U	2 U	1 U	1.8	0.5 U	24	1 U	1 U	3.8	1 U	110	16	1 U	1 U	63	5 U	78	1 U	1 U	5	1	1 U	1 U	130	1 U	0.5 U
	07/21/04	K	0.5 U	1 U	1 U	2 U	1 U	1.8	0.5 U	34	1 U	1 U	4	1 U	120	20	1 U	1 U	56	5 U	76	1	1 U	5	1.1	1 U	1 U	130	1 U	0.5 U
	10/12/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	3	1 U	1 U	3	1 U	68	3.8	1 U	1 U	15	5 U	5 U	1 U	1 U	3.5	1.2	1 U	1 U	57	1 U	0.5 U
	10/12/04	K	0.5 M1 U	1 M1 U	1 M1,U	2 U	1 U	1	0.5 U	3.5	1 U	1 U	3.4	1 U	80	3.8	1 U	1 U	17	5 U	5 U	1 U	1 U	4.2	1.3	1 U	1 M1,U	61	1 U	0.5 U
MW-10	01/15/89		0.5 U	0.5 U	0.64			0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			2.8	3.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.2	0.2 U	0.2 U		32	0.2 U	0.2 U
	04/25/89		0.7 U	1 U	1 U	7		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	1 U	1 U		23	1 U	1 U
	07/15/89		7 U	10 U	10 U	30		10 U	10 U	10 U	10 U	10 U			12	150	10 U	10 U	15		30	10 U	10 U	10 U	10 U	10 U		180	10 U	10 U
	10/15/89		5 U	10 U	190	10 U		10 U	10 U	10 U	10 U	10 U			10 U	50	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10	10 U		70	10 U	10 U
	01/22/90		5 U	5 U	210	10 U		5 U	2 U	2 U	2 U	2 U			9.9	89	5 U	5 U	8.4	2 U	20 U		2 U	2 U	2 U	2 U		84	20 U	2 U
	04/12/90		2.5 U	2.5 U	200	5 U		2.5 U	1 U	1 U	1 U	1 U			4.9	90	2.5 U	2.5 U	5.8	1 U	10 U		1 U	1 U	1 U	1 U		93	10 U	1 U
	04/12/90	K	2.5 U	2.5 U	700	5 U		2.5 U	1 U	1 U	1 U	1 U			10	120	2.5 U	2.5 U	5	1 U	10 U		1 U	1 U	1 U	1 U		87	10 U	1 U
	07/15/90		125 U	200	6500	1500		125 U	50 U	50 U	50 U	50 U	50 U		50 U	310	125 U	125 U	50 U	50 U	500 U	50 U	50 U	50 U	50 U	50 U		240	500 U	50 U
	10/15/90		0.5 U	330	1330	980		250 U	250 U	250 U	250 U	250 U			250 U	250 U	250 U	250 U	250 U		250 U	250 U	250 U	250 U	250 U	250 U		250 U	250 U	250 U
	10/15/90	K	100 U	480	1500	1600		200 U	200 U	200 U	200 U	200 U			200 U	200 U	200 U	200 U	200 U		200 U	200 U	200 U	200 U	200 U	200 U		200 U	200 U	200 U
	01/15/91		0.5 U	1 U	1 U	4			1 U	1 U					1 U	220			1 U		1 U		1 U	1 U				1 U		
MW-11	01/15/89		0.5 U	0.5 U	43			0.2 U	0.2 U	0.38	0.2 U	0.2 U			3.2	27	0.2 U	0.2 U	0.2 U	0.2 U	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		34	0.2 U	0.2 U
	01/15/89	K	0.5 U	0.5 U	17	1.8		0.5 U									0.5 U	0.5 U												
	04/15/89		800	7500	2800	11000		500 U	500 U	500 U	500 U	500 U			500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U		500 U	500 U	500 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated					Chlorinated																						
MW-11	04/15/88	K	5 U	1400	680	740		5 U	5 U	16	5 U	5 U		5 U	8.8	15	5 U	5 U	20	5 U	5 U	5 U	5 U	5 U	5 U	5 U		39	5 U	5 U
	07/15/88		7 U	10 U	10 U	80		1 U	1 U	1	1 U	1 U			4	7	1 U	1 U	2		1	1 U	1 U	1	1 U	1 U		29	1 U	1 U
	10/15/88		5 U	10 U	200	10 U		10 U	10 U	10 U	10 U	10 U			10 U	70	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U		35	10 U	10 U
	01/23/89		5 U	5 U	83	10 U		5 U	2 U	2 U	2 U	2 U			5.5	28	5 U	5 U	2 U	2 U	20 U		2 U	2 U	2 U	2 U		40	20 U	2 U
	04/10/89		2.5 U	2.6	370	180		2.5 U	1 U	1 U	1 U	1 U			1 U	23	2.5 U	2.5 U	1 U	1 U	10 U		1 U	1 U	1 U	1 U		33	10 U	1 U
	07/15/89		25 U	440	1000	780		25 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U	25 U	25 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U	10 U		65	100 U	10 U
	10/15/89		500 U	15000	3000	10000		500 U	500 U	500 U	500 U	500 U			500 U	500 U	500 U	500 U	500 U		500 U	500 U	500 U	500 U	500 U	500 U		500 U	500 U	500 U
	01/15/91		0.5 U	15	4	12			1 U	1 U					1 U	1 U			1 U		1 U		1 U	1 U				1 U		
	04/15/91		100 U	8500	3300	7500		10 U	10 U	10 U	10 U	10 U			10 U	10 U	10 U	10 U	10 U		25 B	10 U	10 U	10 U	10 U	10 U		63	10 U	10 U
	07/15/91		0.5 U	57	520	22		10 U	10 U	10 U	10 U	10 U			10 U	10 U	10 U	10 U	10 U		22	10 U	10 U	10 U	10 U	10 U		81	10 U	10 U
	10/22/91		100 U	140	2000	980		100 U	40 U	40 U	40 U	40 U	40 U		40 U	40 U	100 U	100 U	40 U	200 U	400 U	40 U	40 U	40 U	40 U	40 U		110	400 U	40 U
	01/15/92		1 U	7.3	230	28		1 U	1 U	1 U	1 U	1 U	1 U		8.7	1 U	1 U	1 U	7.9		1 U	1 U	1 U	1 U	3.4	1 U		85	1 U	1 U
	04/15/92		0.5 U	1.7	130	2.3	1.2	0.5 U	0.5 U	1.3	0.5 U	0.5 U	0.77	0.5 U	8.1	0.8	0.58	0.5 U	4.7	0.5 U	0.5 U	0.5 U	0.5 U	0.78	0.5 U	0.5 U	0.5 U	70	0.5 U	0.5 U
	07/15/92		2.5 U	5 U	17	5 U		5 U	5 U	5 U	5 U	5 U			19	5 U	5 U	5 U	6.1		5 U	5 U	5 U	5 U	5 U	5 U		180	5 U	5 U
	10/15/92		0.5 U	1 U	11	1 U		5 U	1 U	1 U	5 U	5 U			18	1 U	5 U	5 U	7.9		5	1 U	5 U	1 U	1 U	5 U		180	5 U	5 U
	01/15/93		1.2 U	2.4 U	110	2.4 U		2 U	2 U	2.1	2 U	2 U			8.5	2 U	2 U	2 U	4.8		2 U	2 U	2 U	2 U	2 U	2 U		86	2 U	2 U
	04/19/93		0.5 U	1 U	2	1 U		1 U	1 U	1.9	1 U	1 U			8.1	1 U	1 U	1 U	4.3		1.3 B	1 U	1 U	1 U	1 U	1 U		59	1 U	1 U
	07/12/93		0.5 U	1.8	2.5	6.4		10 U	10 U	10 U	10 U	10 U			37	10 U	10 U	10 U	11		18 B	10 U	10 U	10 U	10 U	10 U		230	10 U	10 U
	10/13/93		0.5 U	1 U	2.1	3.1		5 U	5 U	5 U	5 U	5 U			27	5 U	5 U	5 U	7.9		5 U	5 U	5 U	5 U	5 U	5 U		150	5 U	5 U
	01/10/94		0.5 U	1 U	2.5	2.8		5 U	5 U	5 U	5 U	5 U			25	5 U	5 U	5 U	12		5 U	5 U	5 U	5 U	5 U	5 U		190	5 U	5 U
	04/12/94		0.5 U	1 U	1 U	1 U		2 U	2 U	2.2	2 U	2 U			17	2 U	2 U	2 U	4.9		2 U	2 U	2 U	2 U	2 U	2 U		80	2 U	2 U
	07/18/94		0.5 U	1 U	1 U	1.6		2.5 U	2.5 U	4.4	2.5 U	2.5 U			32	2.5 U	2.5 U	2.5 U	12		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		180	2.5 U	2.5 U
	10/11/94		0.5 U	1 U	4.8	1 U		10 U	10 U	10 U	10 U	10 U			58	10 U	10 U	10 U	22		10 U	10 U	10 U	10 U	10 U	10 U		380	10 U	10 U
	01/17/95		10 U	880	850	1100		20 U	20 U	20 U	20 U	20 U			130	20 U	20 U	20 U	37		20 U	20 U	20 U	20 U	20 U	20 U		680	20 U	20 U
	04/17/95		50 U	100 U	1800	1000		10 U	10 U	10 U	10 U	10 U			16	10 U	10 U	10 U	10 U		67 B	10 U	10 U	10 U	10 U	10 U		74	10 U	10 U
	07/11/95		2.5 U	5 U	180	37		5 U	5 U	6	5 U	5 U			33	5 U	5 U	5 U	8.2		5 U	5 U	5 U	5 U	5 U	5 U		140	5 U	5 U
	10/09/95		0.5 U	1 U	5.8	2.2		10 U	10 U	10 U	10 U	10 U			44	10 U	10 U	10 U	13		10 U	10 U	10 U	10 U	10 U	10 U		190	10 U	10 U
	01/30/96		25 U	520	480	1000		50 U	50 U	50 U	50 U	50 U			250	50 U	50 U	50 U	60		50 U	50 U	50 U	50 U	50 U	50 U		620	50 U	50 U
	04/16/96		25 U	180	1100	1400		20 U	20 U	20 U	20 U	20 U			87	71	20 U	20 U	31		20 U	20 U	20 U	20 U	20 U	20 U		240	20 U	20 U
	07/15/96		10 U	20 U	480	290		10 U	10 U	10 U	10 U	10 U			50	81	10 U	10 U	17		10 U	10 U	10 U	10 U	10 U	10 U		220	10 U	10 U
	10/08/96		0.5 U	1.9	20	8		10 U	10 U	10 U	10 U	10 U			53	33	10 U	10 U	13		10 U	10 U	10 U	10 U	10 U	10 U		250	10 U	10 U
	01/14/97		0.5 U	9.4	64	88		1 U	1 U	4.4	1 U	1 U			27	4.3	1 U	1 U	16		1 U	1 U	1 U	1 U	1 U	1 U		190	1 U	1 U
	04/16/97		2.5 U	5 U	120	8.2		5 U	5 U	9.8	5 U	5 U			73	12	5 U	5 U	28		5 U	5 U	5 U	5 U	5 U	5 U		370	5 U	5 U
	07/09/97		2.5 U	5 U	8.3	5 U		5 U	5 U	8.3	5 U	5 U			38	8	5 U	5 U	18		5 U	5 U	5 U	5 U	5 U	5 U		240	5 U	5 U
	10/15/97		2.5 U	5 U	5 U	5 U		5 U	5 U	12	5 U	5 U			100	5 U	5 U	5 U	40		5 U	5 U	5 U	5 U	5 U	5 U		350	5 U	5 U
	01/14/98		12 U	770	1800	2200		25 U	25 U	25 U	25 U	25 U			56	25 U	25 U	25 U	28		25 U	25 U	25 U	25 U	25 U	25 U		390	25 U	25 U
	04/22/98		1.2 U	63	150	210		2.5 U	2.5 U	5.2	2.5 U	2.5 U			34	18	2.5 U	2.5 U	19		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		180	2.5 U	2.5 U
	07/15/98		1.2 U	2.5 U	41	4.8		2.5 U	2.5 U	5.8	2.5 U	2.5 U			29	4.2	2.5 U	2.5 U	12		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		150	2.5 U	2.5 U
	10/20/98		5 U	10 U	10 U	10 U		10 U	10 U	16	10 U	10 U			100	10 U	10 U	10 U	33		10 U	10 U	10 U	10 U	10 U	10 U		430	10 U	10 U
	01/15/99		6.2 U	280	750	870		12 U	12 U	28	12 U	12 U			180	17	12 U	12 U	59		12 U	12 U	12 U	12 U	12 U	12 U		880	12 U	12 U
	01/15/99	K													70 U															
	04/15/99		25 U	870	1800	1270		25 U	25 U	25 U	50 U	50 U	25 U		70	28	25 U	25 U	29		25 U	25 U	25 U	25 U	25 U	25 U		480	50 U	50 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated					Chlorinated																						
MW-11	07/15/99		10 U	10 U	85	10 U		10 U	10 U	39	20 U	20 U	28		250	12	10 U	10 U	88		10 U	10 U	10 U	25	17	10 U		740	20 U	20 U
	10/15/99		10 U	10 U	480	52		10 U	10 U	18	20 U	20 U	21		110	110	10 U	10 U	58		10 U	10 U	10 U	10 U	10 U	10 U		850	20 U	20 U
	01/25/00		12 U	12 U	12 U	24 U		12 U	12 U	29	25 U	25 U	80		230	22	12 U	12 U	100		12 U	12 U	12 U	22	12 U	12 U		820	25 U	25 U
	04/15/00		12 U	12 U	58	17		12 U	12 U	30	25 U	25 U	64		220	85	12 U	12 U	98		12 U	12 U	12 U	12 U	12 U	12 U		1100	25 U	25 U
	10/15/00		50 U	50 U	50 U	50 U		50 U	880	810	100 U	100 U	50 U		380	220	50 U	50 U	480		50 U	50 U	50 U	88	50 U	50 U		2900	100 U	100 U
	04/16/01		25 U	25 U	48	25 U		25 U	25 U	64	50 U	50 U	51		370	25 U	25 U	25 U	140		25 U	25 U	25 U	25 U	25 U	25 U		1700	50 U	50 U
	07/17/01		5 U	5 U	5 U	5 U		5 U	5 U	8.9	10 U	10 U	9		67	5 U	5.7	5 U	30		5 U	5 U	5 U	5 U	5 U	5 U		400	10 U	10 U
	10/18/01		25 U	25 U	90	122		25 U	25 U	50	50 U	50 U	51		410	25 U	25 U	25 U	95		25 U	25 U	25 U	25 U	27	25 U		1600	50 U	50 U
	01/17/02		25 U	31	1800	430		25 U	25 U	25 U	50 U	50 U	54		120	25 U	25 U	25 U	44		25 U	25 U	25 U	25 U	25 U	25 U		830	50 U	50 U
	04/18/02		25 U	25 U	300	50 U		25 U	25 U	44	50 U	50 U	66		380	25 U	25 U	25 U	89		25 U	25 U	25 U	25 U	27	25 U		1300	50 U	50 U
	07/29/02		50 U	50 U	50 U	100 U		50 U	50 U	50 U	100 U	100 U	58		410	50 U	50 U	50 U	110		50 U	50 U	50 U	50 U	50 U	50 U		1500	100 U	100 U
	10/24/02		10 U	10 U	380	20 U		10 U	10 U	24	20 U	20 U	38		140	130	10 U	10 U	58		10 U	10 U	10 U	10 U	10 U	10 U	10 U	700	20 U	20 U
	12/30/02		1.4 J	20 U	31	40 U		3.5 J	20 U	15 J	20 U	20 U	22	20 U	110	100	3.2 J	20 U	42	20 U	20 U	20 U	20 U	3.4 J	20 U	20 U		580	20 U	20 U
	04/25/03		2.5 U	5 U	5 U	10 U	5 U	5 U	2.5 U	13	5 U	5 U	28	5 U	120	16	5 U	5 U	40	25 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	410	5 U	2.5 U
	07/31/03		5 U	10 U	210	94	10 U	10 U	5 U	50	10 U	10 U	44	10 U	370	5.4	10 U	10 U	95	50 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U	1100	10 U	5 U
	10/23/03		20 U	20 U	710	40 U		20 U	50 U	20 U	80 U	80 U	48		68	300	20 U	20 U	50 U	50 U	80 U	20 U	20 U	20 U	20 U	20 U	9.9 U	380	80 U	80 U
	01/23/04		1 U	2 U	24	4 U	2 U	2 U	1 U	4.7	2 U	2 U	24	2 U	37	22	2 U	2 U	15	10 U	10 U	2 U	2 U	2.8	2 U	2 U	2 U	180	2 U	1 U
	04/21/04		1 U	2 U	3.6	4 U	2 U	2 U	1 U	8.2	2 U	2 U	8.2	2 U	40	24	2 U	2 U	16	10 U	10 U	2 U	2 U	3.3	2 U	2 U	2 U	200	2 U	1 U
	07/21/04		0.5	1 U	84	2 U	1 U	1 U	0.5 U	3.4	1 U	1 U	16	1 U	28	60	1 U	1 U	16	5 U	5 U	1 U	1 U	3.4	1 U	1 U	1 U	190	1 U	0.5 U
	10/12/04		2 U	2 U	29	4 U		2 U	5 U	3.6	5 U	5 U	13		40	21	2 U	2 U	13	5 U	6 U	2 U	2 U	4.2	2 U	2 U	9.8 U	180	5 U	5 U
MW-12D	10/15/90		0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	10 U	10 U		10 U	5 U	5 U	10 U	10 U	5 U	20 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	5 U	5 U	10 U
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U					1 U	1 U			1 U		1 U		1 U	1 U				1 U		
MW-12S	10/15/90		0.5 U	1 U	11	1 U		5 U	5 U	5 U	10 U	10 U		10 U	5 U	35	13 U	13 U	5 U	20 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	8.8	5 U	10 U
	01/15/91		0.5 U	1 U	4.5	1 U			1 U	1 U					1 U	27			1 U		1 U		1 U	1 U				10		
MW-13D	10/15/90		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.8	1 U	1 U
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U					1 U	1 U			1 U		1 U		1 U	1 U				1.5		
MW-13S	10/15/90		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1.5	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		23	1 U	1 U
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U					1.8	1 U			1 U		1 U		3	1 U				7.8 U		
	07/14/93		0.5 U	4	16	27		1 U	1 U	1 U	1 U	1 U			36	18	1 U	1 U	3.3		2.3 B	3.9	1 U	1 U	1 U	1 U		30	1 U	1 U
	10/15/93		0.5 U	1 U	13	3		2 U	2 U	2 U	2 U	2 U			9.7	71	2 U	2 U	2 U		2 U	2 U	2 U	2 U	2 U	2 U		18	2 U	2 U
MW-14D	10/15/90		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		15	1 U	1 U
	01/15/91		0.5 U	1 U	1 U	1 U			1 U	1 U					1 U	1 U			1 U		1 U		1 U	1 U				1.8		
MW-14S	10/15/90		0.5 U	1 U	1750	1 U		10 U	10 U	10 U	10 U	10 U			20	48	10 U	10 U	28		40	10 U	10 U	10 U	10 U	10 U		180	10 U	10 U
	01/15/91		0.5 U	1 U	2	1 U			1 U	1 U					13	38			15		13		1 U	1 U				108		
	04/15/91		50 U	100 U	3300	100 U		10 U	10 U	10 U	10 U	10 U			10 U	24	10 U	10 U	22		31 B	10 U	10 U	10 U	10 U	10 U		94	10 U	10 U
	07/15/91		0.5 U	1 U	31	1 U		5 U	5 U	5 U	5 U	5 U			5 U	12	5 U	5 U	7.2		28	5 U	5 U	5 U	5 U	5 U		56	5 U	5 U
	10/23/91		20 U	20 U	410	40 U		20 U	8 U	8 U	8 U	8 U	8 U		11	19	20 U	20 U	15	40 U	80 U	8 U	8 U	8 U	8 U	8 U		61	80 U	8 U
	10/23/91	K	25 U	25 U	370	50 U		25 U	10 U	10 U	10 U	10 U	10 U		11	24	25 U	25 U	14	50 U	100 U	10 U	10 U	10 U	10 U	10 U		81	100 U	10 U
	01/15/92		1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		8.6	8.4	1 U	1 U	20		1 U	1 U	1 U	1 U	1 U	1 U		58	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Non-chlorinated: Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chlorinated: Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-14S	04/15/92		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6	0.5 U	0.5 U	0.86	0.5 U	7	5.6	0.5 U	0.5 U	11	0.5 U	1	0.5 U	0.5 U	0.6	0.5 U	0.5 U	0.5 U	58	0.5 U	0.5 U
	07/15/92		0.6	1 U	1 U	1 U		1 U	1 U	1.4	1 U	1 U			4.4	1.2	1 U	1 U	5.8		2.8	1 U	1 U	1 U	1 U	1 U		44	1 U	1 U
	07/15/92	K	0.6	1 U	1 U	1 U		1 U	1 U	1.4	1 U	1 U			4.2	1.2	1 U	1 U	5.5		2.8	1 U	1 U	1 U	1 U	1 U		43	1 U	1 U
	10/15/92		0.5 U	1 U	1 U	1 U		2 U	1 U	2.3	2 U	2 U			8.1	3.9	2 U	2 U	9.4		3.5	1 U	2 U	1 U	1 U	2 U		71	2 U	2 U
	01/15/93		0.5 U	1 U	1 U	1 U		1 U	1 U	8.1	1 U	1 U			5.3	16	1 U	1 U	7.4		2.1	1 U	1 U	1 U	1 U	1 U		56	1 U	1 U
	04/22/93		0.5 U	24	40	56		1 U	2.3	3.8	1 U	1 U			14	1 U	1 U	1 U	2.3		1 U	1 U	1 U	1 U	1 U	1 U		18	1 U	1 U
	04/22/93	K	0.5 U	22	39	57		1 U	2.3	3.7	1 U	1 U			15	1 U	1 U	1 U	2.3		1.6 B	1 U	1 U	1 U	1 U	1 U		15	1 U	1 U
	07/13/93		0.5 U	1.3	1.2	3.8		1 U	2.1	6.4	1 U	1 U			1.9	1 U	1 U	1 U	2.8		1.7 B	1 U	1 U	1 U	1 U	1 U		25	1 U	1 U
	10/14/93		0.5 U	1 U	2.1	3.7		1 U	4.4	8.2	1 U	1 U			2.6	1 U	1 U	1 U	3.3		1.4 B	1 U	1 U	1 U	1 U	1 U		25	1 U	1 U
	01/12/94		0.5 U	1 U	3.2	1.4		1 U	4.3	8.7	1 U	1 U			2.2	1 U	1 U	1 U	3		1.2 B	1 U	1 U	1 U	1 U	1 U		21	1 U	1 U
	04/13/94		0.5 U	1 U	1 U	1 U		1 U	11	18	1 U	1 U			2.7	1 U	1 U	1 U	3.1		1.2 B	1 U	1 U	1 U	1 U	1 U		29	1 U	1 U
	07/20/94		0.6 U	1 U	1 U	1 U		1 U	11	8.8	1 U	1 U			1 U	1 U	1 U	1 U	1.8		1 U	1 U	1 U	1 U	1 U	1 U		15	1 U	1 U
	10/11/94		0.53	1 U	1 U	1 U		2 U	12	17	2 U	2 U			6	2 U	2 U	2 U	8.2		2 U	2 U	2 U	2 U	2 U	2 U		58	2 U	2 U
	02/08/95		50 U	100 U	3000	880		1 U	18	11	1 U	1 U			7.8	3.3	1 U	1 U	6.2		1 U	1 U	1 U	1 U	1 U	1 U		88	1 U	1 U
	04/18/95		2.6 U	78	120	180		1 U	17	18	1 U	1 U			2.5	1 U	1 U	1 U	2.8		4.2 B	1 U	1 U	1.5	1 U	1 U		28	1 U	1 U
	07/12/95		0.8 U	2.8	28	12		1 U	14	14	1 U	1 U			2.8	1 U	1 U	1 U	3		1.5 B	1 U	1 U	1.6	1 U	1 U		22	1 U	1 U
	10/11/95		0.5 U	1 U	2.1	2		2 U	28	27	2 U	2 U			4.8	2 U	2 U	2 U	5.7		2.4	2 U	2 U	2 U	2 U	2 U		38	2 U	2 U
	02/01/96		1 U	4.7	87	58		2 U	12	11	2 U	2 U			8.8	2 U	2 U	2 U	6.5		2 U	2 U	2 U	2 U	2 U	2 U		42	2 U	2 U
	04/17/96		2.5 U	54	120	110		2 U	32	37	2 U	2 U			7.7	6.7	2 U	2 U	7.7		3.1	2 U	2 U	2 U	2 U	2 U		51	2 U	2 U
	07/17/96		0.58	1 U	20	10		2 U	28	22	2 U	2 U			5.3	4.9	2 U	2 U	5.8		2 U	2 U	2 U	2 U	2 U	2 U		37	2 U	2 U
	10/08/96		0.5 U	1 U	13	2.9		2 U	28	30	2 U	2 U			11	3.1	2 U	2 U	9.8		2 U	2 U	2 U	2 U	2 U	2 U		61	2 U	2 U
	01/15/97		2.5 U	5 U	470	5 U		5 U	42	34	5 U	5 U			19	19	5 U	5 U	20		5 U	5 U	5 U	5 U	5 U	5 U		98	5 U	5 U
	04/16/97		0.58	2.9	91	35		1 U	25	21	1 U	1 U			9.6	9	1 U	1 U	8.3		1.6	1 U	1 U	2.2	1 U	1 U		46	1 U	1 U
	07/10/97		0.5 U	1 U	14	1 U		1 U	18	17	1 U	1 U			7.1	4.2	1 U	1 U	8.7		1.4	1 U	1 U	4.4	1 U	1 U		35	1 U	1 U
	10/16/97		0.5 U	1 U	20	1.8		1 U	34	25	1 U	1 U			28	1.2	1 U	1 U	17		2.3	1 U	1 U	1 U	1 U	1 U		57	1 U	1 U
	01/15/98		0.8 U	1.1	19	5		1 U	21	11	1 U	1 U			13	4.7	1 U	1 U	11		1 U	1 U	1 U	1.2	1 U	1 U		98	1 U	1 U
	04/23/98		12 U	25 U	1500	150		25 U	25 U	25 U	25 U	25 U			25 U	25 U	25 U	25 U	25 U		25 U	25 U	25 U	25 U	25 U	25 U		38	25 U	25 U
	07/15/98		0.51	1 U	18	8.4		1 U	3.7	8.2	1 U	1 U			5.5	12	1 U	1 U	5.8		1.4	1 U	1 U	1 U	1 U	1 U		18	1 U	1 U
	10/21/98		1.2 U	2.5 U	120	29		2.5 U	25	20	2.5 U	2.5 U			17	6	2.5 U	2.5 U	13		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		82	2.5 U	2.5 U
	01/15/99		1.1	2 U	77	84		2 U	31	23	2 U	2 U			27	5.8	2 U	2 U	21		2.8	2 U	2 U	2 U	2 U	2 U		98	2 U	2 U
	01/15/99	K				47 U																								
	04/15/99		12 U	12 U	820	47		12 U	28	18	25 U	25 U	12 U		38	20	12 U	12 U	22		12 U	12 U	12 U	12 U	12 U	12 U		84	25 U	25 U
	07/15/99		50 U	50 U	3000	50 U		50 U	50 U	50 U	100 U	100 U	50 U		50 U	50 U	50 U	50 U	50 U		50 U	50 U	50 U	50 U	50 U	50 U		74	100 U	100 U
	10/15/99		5 U	5 U	120	10 U		5 U	37	32	10 U	10 U	12		67	22	5 U	5 U	88		5 U	5 U	5 U	5 U	5 U	5 U		180	10 U	10 U
	01/27/00		5 U	5 U	5 U	10 U		5 U	35	29	10 U	10 U	14		81	31	5 U	5 U	80		5.7	5 U	5 U	5 U	5 U	5 U		230	10 U	10 U
	04/15/00		3.2	2 U	110	2 U		2 U	5.1	5	4 U	4 U	13		19	96	2 U	2 U	13		2 U	2 U	2 U	2 U	2 U	2 U		60	4 U	4 U
	10/15/00		5 U	5 U	230	5 U		5 U	25	25	10 U	10 U	11		40	17	5 U	5 U	30		5 U	5 U	5 U	5 U	5 U	5 U		170	10 U	10 U
	04/15/01		2.1	2 U	8.6	2 U		2 U	28	23	4 U	4 U	6.7		38	12	2 U	2 U	27		2 U	2 U	2 U	2 U	2 U	2 U		130	4 U	4 U
	07/18/01		1 U	1 U	1 U	1 U		1 U	2.2	2.2	2 U	2 U	2.1		7.4	3.5	1 U	1 U	6.6		1 U	1 U	1 U	1.2	1 U	1 U		35	2 U	2 U
	10/17/01		2 U	2 U	2.4	2 U		2.3	22	23	4 U	4 U	5.2		88	8.4	2 U	2 U	30		2 U	2 U	2 U	2.4	2 U	2 U		170	4 U	4 U
	01/16/02		50 U	50 U	2700	1100		50 U	50 U	50 U	100 U	100 U	50 U		50 U	50 U	50 U	50 U	50 U		50 U	50 U	50 U	50 U	50 U	50 U		91	100 U	100 U
	04/17/02		2 U	2 U	2 U	3.8		2 U	18	18	4 U	4 U	5.3		41	13	2 U	2 U	30		2 U	2 U	2 U	2 U	2 U	2 U		130	4 U	4 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

			Non-chlorinated					Chlorinated																						
Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-14S	07/25/02		25 U	25 U	880	50 U		25 U	25 U	25 U	50 U	50 U	25 U		43	25 U	25 U	25 U	38		25 U	25 U	25 U	25 U	25 U	25 U		150	50 U	50 U
	10/23/02		5 U	5 U	14	10 U		5 U	15	28	10 U	10 U	8		85	8.9	5 U	5 U	71		5 U	5 U	5 U	5 U	5 U	5 U	10 U	380	10 U	10 U
	12/30/02		1.2 J	10 U	130	110 U		18 J	7.2 J	13	10 U	10 U	12	10 U	50	56	10 U	10 U	36	10 U	2.7 J	10 U	10 U	17 J	10 U	10 U		190	10 U	10 U
	04/24/03		28	4 U	240	15.4	9	4 U	6.6	12	4 U	4 U	10	4 U	47	38	4 U	4 U	37	20 U	20 U	4 U	4 U	4 U	4 U	4 U	4 U	180	4 U	2 U
	07/30/03		14	1 U	49	2 U	1.6	3.1	11	26	1 U	1 U	8.5	1 U	79	19	1 U	1 U	59	5 U	5 U	1 U	1 U	3.3	1 U	1 U	1 U	200	1 U	0.5 U
	10/23/03		20 U	20 U	80	40 U		20 U	50 U	37	50 U	50 U	20 U		110	48	20 U	20 U	90	50 U	50 U	20 U	20 U	20 U	20 U	20 U	0.5 U	490	50 U	50 U
	01/22/04		2 U	4 U	4 U	8 U	4 U	4.5	16	34	4 U	4 U	13	4 U	100	36	4 U	4 U	78	20 U	20 U	4 U	4 U	5.4	4 U	4 U	4 U	480	4 U	2 U
	04/21/04		2.2	4 U	4 U	8 U	4 U	4.3	17	33	4 U	4 U	13	4 U	87	28	4 U	4 U	77	20 U	20 U	4 U	4 U	4.9	4 U	4 U	4.8	570	4 U	2 U
	07/21/04		2.9	5 U	5 U	10 U	5 U	5 U	11	29	5 U	5 U	33	5 U	97	28	5 U	5 U	79	25 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	500	5 U	2.5 U
	10/12/04		2 U	2 U	2 U	4 U		2	5 U	8.7	5 U	5 U	48		83	23	2 U	2 U	40	5 U	13	2 U	2 U	2.9	2 U	2 U	0.5 U	180	5 U	5 U
MW-15D	10/15/90		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		0.02 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U
	01/15/91		0.5 U	1.3	1 U	1 U			1 U	1 U					1 U	1 U			1 U		1 U		1 U	1 U				1 U		
	04/16/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		4.1 B	1 U	1 U	1 U	1 U	1 U		1.2	1 U	1 U
	07/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.7	1 U	1 U	1 U	1 U	1 U		1.3	1 U	1 U
	10/22/91		0.5 U	0.5 U	0.5 U	1 U		0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	1 U	2 U	0.2 U	0.2 U	7	0.2 U	0.2 U		1.8	2 U	0.2 U
	01/15/92		1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2	1 U	1 U
	04/15/92		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4	0.5 U	0.5 U	0.5 U	1.8	0.5 U	0.5 U
	07/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.5	1 U	1 U	1 U	1 U	1 U		1.9	1 U	1 U
	10/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.3	1 U	1 U		2.8	1 U	1 U
	01/15/93		0.5 U	13	18	38		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		2.5	1 U	1 U
	04/21/93		0.5 U	42	29	71		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.9 B	1 U	1 U	1 U	1 U	1 U		2.8	1 U	1 U
	07/14/93		1.1	5.3	2.4	8.5		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		4.1	1 U	1 U
	10/14/93		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.8	1 U	1 U
	01/12/94		0.88	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.3	1 U	1 U
	04/13/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		1.7	1 U	1 U
	07/20/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2	1 U	1 U
	10/12/94		0.5 U	1.4	1.1	8.3		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.6	1 U	1 U
	01/18/95		1.1	1 U	15	6.8		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.3	1 U	1 U		1.5	1 U	1 U
	04/18/95		2.5 U	14	32	58		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.2	1 U	1 U		1.4	1 U	1 U
	07/12/95		0.5 U	1 U	6.3	5		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.7	1 U	1 U		2.6	1 U	1 U
	10/11/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		2.3	1 U	1 U
	02/01/96		0.5 U	1.2	18	14		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.2	1 U	1 U
	04/17/96		1 U	10	32	36		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2	1 U	1 U		3.8	1 U	1 U
	07/17/96		0.5 U	1 U	6.8	3.8		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3	1 U	1 U		3.7	1 U	1 U
	10/09/96		0.5 U	1 U	5.4	5.5		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5	1 U	1 U
	01/15/97		0.5 U	7.2	35	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		4.1	1 U	1 U
	04/17/97		0.5 U	1 U	5	1.6		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2	1 U	1 U		3.6	1 U	1 U
	07/10/97		0.5 U	1 U	6.2	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.8	1 U	1 U		3.4	1 U	1 U
	10/16/97		0.5 U	1 U	14	1.4		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.5	1 U	1 U		3.8	1 U	1 U
	01/15/98		0.5 U	1 U	7.8	2.3		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.4	1 U	1 U		3.8	1 U	1 U
	04/23/98		0.5 U	1 U	44	4		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		6.1	1 U	1 U
	07/16/98		0.5 U	1 U	7.8	2.4		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.7	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated					Chlorinated																						
MW 15D	10/21/98		0.5 U	1 U	28	8.8		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.8	1 U	1 U
	01/15/99		0.5 U	1 U	15	2.1		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1	1 U	1 U		5.4	1 U	1 U
	04/15/99		1 U	1 U	12	1.8		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	2.3		1 U	1 U	1 U	13	1 U	1 U		25	2 U	2 U
	07/15/99		1 U	1 U	34	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1.1		1 U	1 U	1 U	13	1 U	1 U		8	2 U	2 U
	10/15/99		1 U	1 U	6	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.5	1 U	1 U		5.1	2 U	2 U
	01/28/00		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	5.3	1 U	1 U		8.7	2 U	2 U
	04/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1.1		1 U	1 U	1 U	7.4	1 U	1 U		13	2 U	2 U
	10/15/00		1.8	1 U	2.9	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	4	1 U	1 U		8.7	2 U	2 U
	04/15/01		1 U	1 U	11	2.1		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	6.4	1 U	1 U		12	2 U	2 U
	07/19/01		1 U	1 U	2.5	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		28	2 U	2 U
	10/17/01		2.2	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.4	1 U	1 U		6.7	2 U	2 U
	01/18/02		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	8	1 U	1 U		6.4	2 U	2 U
	04/17/02		1.1	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.8	1 U	1 U		6.1	2 U	2 U
	07/25/02		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.9	1 U	1 U		3.4	2 U	2 U
	10/22/02		1.2	1 U	3.8	4.8		1 U	1 U	1 U	2 U	2 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.4	1 U	1 U		8.2	2 U	2 U
	01/08/03		1.3	1 U	7.7	2.3	1 U	1 U	0.52	1.1	1 U	1 U	1 U	1 U	1	2	1 U	1 U	1 U	5 U	5 U	1 U	1 U	2.4	1 U	1 U	1 U	11	1 U	0.5 U
	04/23/03		2.3	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	1 U	1 U	1 U	5 U	5 U	1 U	1 U	2	1 U	1 U	1 U	7.6	1 U	0.5 U
	07/30/03		1.4	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.77	1 U	1 U	1 U	5 U	5 U	1 U	1 U	4.1	1 U	1 U	1 U	8.1	1 U	0.5 U
	10/21/03		1.8	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6	1 U	1 U	1 U	5 U	5 U	1 U	1 U	2.3	1 U	1 U	1 U	6.3	1 U	0.5 U
	01/22/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	2.3	1 U	1 U	1 U	3	1 U	0.5 U
	04/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	3.6	1 U	0.5 U
	07/28/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.2	1 U	1 U	1 U	2.6	1 U	0.5 U
	10/11/04		0.63	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1.6	1 U	0.5 U
MW-15S	10/15/90		0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	10 U	10 U		10 U	5 U	16			5 U	20 U	5 U	5 U	5 U	5 U	51 U	5 U		21	5 U	10 U
	01/15/91		0.5 U	4	1.6	4			1 U	1 U					1 U	9.8			1		1 U		1 U	1 U				13		
	04/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	12	1 U	1 U	1.5		7.1	1 U	1 U	1 U	1 U	1 U		20	1 U	1 U
	07/15/91		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1.3		2	1 U	1 U	1 U	1 U	1 U		17	1 U	1 U
	10/22/91		1 U	1 U	1 U	2 U		1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U		0.71	0.4 U	1 U	1 U	1.1	2 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U		13	4 U	0.4 U
	01/15/92		1 U	1 U	1 U	1 U		1 U	1	2	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		15	1 U	1 U
	04/15/92		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.81	0.5 U	0.5 U	0.5 U	4.1	0.5 U	0.5 U
	07/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.1	1 U	1 U	1 U	1 U	1 U		2.8	1 U	1 U
	10/15/92		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		7.7	1 U	1 U
	01/15/93		0.5 U	1 U	1 U	1 U		1 U	1 U	2.1	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		9	1 U	1 U
	04/21/93		0.5 U	14	10	22		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		12.8	1 U	1 U	7.4	1 U	1 U		4.6	1 U	1 U
	07/14/93		0.5 U	1.2	1 U	2.4		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1.8	1 U	1 U	1 U	1 U	1 U		2.4	1 U	1 U
	10/14/93		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.2	1 U	1 U
	01/12/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		1.9	1 U	1 U
	04/13/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.1	1 U	1 U
	07/20/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.1	1 U	1 U
	10/11/94		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		8	1 U	1 U
	01/18/95		1 U	4	64	27		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	6.3	1 U	1 U		3.7	1 U	1 U
	04/19/95		2.5 U	80	82	130		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2.6	1 U	1 U		2.8	1 U	1 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCl4	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
			Non-chlorinated					Chlorinated																						
MW 15S	07/12/95		0.5 U	2.5	16	12		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2	1 U	1 U		5.2	1 U	1 U
	10/11/95		0.5 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.4	1 U	1 U		3.9	1 U	1 U
	02/01/96		0.5 U	1.8	25	22		1 U	1.9	1.5	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.8	1 U	1 U
	04/17/96		0.5 U	13	40	45		1 U	2.5	1.4	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		2.8	1 U	1 U
	07/17/96		0.5 U	1 U	9.7	5.4		1 U	2	1.1	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.2	1 U	1 U
	10/08/96		0.5 U	1 U	2.9	2.6		1 U	3.8	2.2	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5.3	1 U	1 U
	01/15/97		0.5 U	5.5	60	1 U		1 U	3.3	2.1	1 U	1 U			1 U	4.7	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5.1	1 U	1 U
	04/17/97		0.5 U	9.3	21	8.5		1 U	2	1.3	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	4.1	1 U	1 U		3.3	1 U	1 U
	07/10/97		0.5 U	1 U	8.2	1.3		1 U	2.6	2.2	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	3.4	1 U	1 U		4.1	1 U	1 U
	10/16/97		0.5 U	1 U	17	1.7		1 U	2.2	3.9	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		5.2	1 U	1 U
	01/15/98		0.5 U	1 U	12	3.7		1 U	4.2	2.9	1 U	1 U			1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1.4	1 U	1 U		5	1 U	1 U
	04/23/98		0.5 U	1 U	60	7.2		1 U	1.4	1.8	1 U	1 U			1 U	25	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.1	1 U	1 U
	07/15/98		0.5 U	1 U	10	2.6		1 U	1 U	2.8	1 U	1 U			1 U	8.8	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.4	1 U	1 U
	10/21/98		0.5 U	1 U	45	12		1 U	3	3.2	1 U	1 U			1 U	4.5	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U		3.9	1 U	1 U
	01/15/99		0.5 U	1 U	19	2.2		1 U	4.4	4.4	1 U	1 U			1 U	1.7	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		7	1 U	1 U
	01/15/99	K	1 U	1 U	10 U	2.2 U																							4.2 U		
	04/15/99		1 U	1 U	23	2.2		1 U	1.7	2.8	2 U	2 U	1 U		1 U	75	1 U	1 U	1 U		1 U	1 U	1 U	1.3	1 U	1 U		4.2	2 U	2 U
	07/15/99		1 U	1 U	29	23		1 U	2.5	4.2	2 U	2 U	1 U		1 U	34	1 U	1 U	1 U		1 U	1 U	1 U	8.1	1 U	1 U		3.9	2 U	2 U
	10/15/99		2 U	2 U	12	2 U		2 U	2 U	2.1	4 U	4 U	2 U		2 U	110	2 U	2 U	2 U		2 U	2 U	2 U	2 U	2 U	2 U		8.7	4 U	4 U
	01/28/00		1 U	1 U	9.3	2 U		1 U	1 U	2.9	2 U	2 U	13		10	23	1 U	1 U	5.3		1 U	1 U	1 U	1 U	1 U	1 U		25	2 U	2 U
	04/15/00		1 U	1 U	1 U	1 U		1 U	1 U	1.8	2 U	2 U	9.8		8.2	76	1 U	1 U	2.5		1 U	1 U	1 U	1.3	1 U	1 U		17	2 U	2 U
	10/15/00		1 U	1 U	17	1 U		1 U	3.9	8.8	2 U	2 U	2.3		1 U	37	1 U	1 U	1 U		1 U	1 U	1 U	1.3	1 U	1 U		8.7	2 U	2 U
	04/15/01		1 U	1 U	1 U	1 U		1 U	2.2	4.3	2 U	2 U	1 U		1 U	16	1 U	1 U	1 U		1 U	1 U	1 U	1.3	1 U	1 U		3	2 U	2 U
	07/19/01		1 U	1 U	1 U	1 U		1 U	2.1	4	2 U	2 U	1 U		1 U	11	1 U	1 U	1 U		1 U	1 U	1 U	1.4	1 U	1 U		8.1	2 U	2 U
	10/17/01		1 U	1 U	1 U	1 U		1 U	2	3.6	2 U	2 U	1 U		1 U	8.2	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		2.8	2 U	2 U
	01/18/02		1 U	1 U	1 U	1 U		1 U	1.4	2.9	2 U	2 U	1 U		1 U	8.8	1 U	1 U	1 U		1 U	1 U	1 U	1.1	1 U	1 U		2.7	2 U	2 U
	04/17/02		1 U	1 U	1 U	2 U		1 U	2.9	4	2 U	2 U	1 U		1 U	3	1 U	1 U	1 U		12	1 U	1 U	1.1	1 U	1 U		2.9	2 U	2 U
	07/24/02		1 U	1 U	1 U	2 U		1 U	1.3	2.8	2 U	2 U	1 U		1 U	3	1 U	1 U	1 U		1 U	1 U	1 U	1.2	1 U	1 U		4.4	2 U	2 U
	10/23/02		1 U	1 U	1 U	2 U		1 U	3.6	8.7	2 U	2 U	1 U		2.6	2.8	1 U	1 U	1.3		1 U	1 U	1 U	1.5	1 U	1 U		13	2 U	2 U
	01/08/03		0.53	1 U	6	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	6.9	1 U	8.3	14	1 U	1 U	2.9	5 U	8 U	1 U	1 U	1.3	1 U	1 U	1 U	22	1 U	0.5 U
	04/24/03		0.5	1 U	1 U	2 U	1 U	1 U	0.5 U	2	1 U	1 U	1 U	1 U	1 U	12	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	3.2	1 U	0.5 U
	07/30/03		0.5 U	1 U	1 U	2 U	1 U	1 U	4.5	21	1 U	1 U	1 U	1 U	1 U	13	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.2	1 U	1 U	1 U	5.1	1 U	0.5 U
	10/22/03		0.5 U	1 U	1 U	2 U	1 U	1 U	2	11	1 U	1 U	1 U	1 U	2.7	22	1 U	1 U	2.4	5 U	5 U	1 U	1 U	2.2	1 U	1 U	1 U	21	1 U	0.5 U
	01/22/04		0.61	1 U	1 U	2 U	1 U	1 U	0.5 U	5.4	1 U	1 U	10	1 U	28	78	1 U	1 U	15	5 U	5 U	1 U	1 U	2.5	1 U	1 U	1 U	86	1 U	0.5 U
	04/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.63	4.3	1 U	1 U	7.6	1 U	16	40	1 U	1 U	6.8	5 U	5 U	1 U	1 U	2.2	1 U	1 U	1 U	73	1 U	0.5 U
	07/20/04		0.79	1 U	1 U	2 U	1 U	1.1	2.6	15	1 U	1 U	8.1	1 U	29	33	1 U	1 U	18	5 U	5 U	1 U	1 U	3.8	1 U	1 U	1 U	120	1 U	0.5 U
	10/11/04		0.58	1 U	1 U	2 U	1 U	1.1	0.5 U	3.7	1 U	1 U	17	1 U	38	24	1 U	1 U	19	5 U	5 U	1 U	1 U	2.8	1 U	1 U	1 U	98	1 U	0.5 U
MW 16	04/15/92		0.5 U	0.80	0.5	1.6	0.5 U	0.5 U	0.5 U	0.88	0.5 U	0.5 U	13	0.5 U	140	120	0.5 U	0.5 U	15	0.5 U	0.5 U	2.4	0.5 U	0.88	0.5 U	0.5 U	0.5 U	52	0.5 U	0.5 U
	04/15/92	K	0.5 U	0.5 U	0.5 U	1.1	0.5 U	0.5 U	0.5 U	0.87	0.5 U	0.5 U	13	0.5 U	150	130	0.5 U	0.5 U	14	0.5 U	0.5 U	2.4	0.5 U	0.63	0.5 U	0.5 U	0.5 U	90	0.5 U	0.5 U
	07/15/92		0.5 U	1 U	1 U	1 U		2 U	2 U	2.4	2 U	2 U			50	81	2 U	2 U	5		3.3	2 U	2 U	2 U	2 U	2 U		38	2 U	2 U
	10/15/92		0.5 U	1 U	1 U	1 U		2.5 U	1 U	3.3	2.5 U	2.6 U			130	82	2.5 U	2.5 U	10		4.6	1 U	2.5 U	1 U	1 U	2.6 U		72	2.5 U	2.5 U
	10/15/92	K	0.8 U	1 U	1 U	1 U		2.5 U	1 U	3.3	2.5 U	2.5 U			130	90	2.5 U	2.5 U	10		4.3	1 U	2.6 J	1 U	1 U	2.5 U		[illegible]	[illegible]	[illegible]

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Isopropylbenzene	Chlorobenzene	CCl4	CFM	Chloroethane	Chloromethane	cis-1,2-DCE	1,2-DBE
			Non-chlorinated					Chlorinated						
MW-16	01/15/93		1.2 U	2.4 U	2.4 U	2.4 U		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		
	04/22/93		25 U	55	2300	1200		8.1	1 U	1 U	1 U	1 U		
	07/14/93		50 U	100 U	3100	2000		100 U	20 U	20 U	20 U	20 U		
	07/14/93	K	50 U	100 U	3100	2800		20 U	20 U	20 U	20 U	20 U		
	10/14/93		5 U	10 U	340	10 U		1 U	1 U	1 U	1 U	1 U		
	01/12/94		10 U	20 U	1000	20 U		20 U	1 U	1 U	1 U	1 U		
	01/12/94	K	10 U	20 U	1000	20 U		2 U	2 U	2 U	2 U	2 U		
	04/13/94		10 U	20 U	820	20 U		5 U	5 U	5 U	5 U	5 U		
	04/13/94	K	10 U	20 U	1000	20 U		5 U	5 U	5 U	5 U	5 U		
	07/20/94		25 U	50 U	1300	730		5 U	5 U	5 U	5 U	5 U		
	07/20/94	K	25 U	50 U	1300	710		5 U	5 U	5 U	5 U	5 U		
	10/13/94		0.5 U	1.5	2.4	9.7		10 U	10 U	10 U	10 U	10 U		
	10/13/94	K	0.53	1.9	2.4	10		10 U	10 U	10 U	10 U	10 U		
	01/16/95		0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	5 U	5 U		
	01/16/95	K	0.5 U	1 U	1 U	1 U		5 U	5 U	5 U	5 U	5 U		
	04/19/95		5 U	16	38	55		10 U	10 U	10 U	10 U	10 U		
	04/19/95	K	2.5 U	16	33	51		5 U	5 U	5 U	5 U	5 U		
	07/13/95		10 U	20 U	540	20 U		5 U	5 U	5 U	5 U	5 U		
	07/13/95	K	10 U	20 U	370	20 U		5 U	5 U	5 U	5 U	5 U		
	10/11/95		0.5 U	1 U	1.9	1.3		10 U	10 U	10 U	10 U	10 U		
	10/11/95	K	0.5 U	1 U	2	1.5		10 U	10 U	10 U	10 U	10 U		
	02/01/96		0.5 U	1 U	11	9.7		10 U	10 U	10 U	10 U	10 U		
	02/01/96	K	0.5 U	1 U	13	11		10 U	10 U	10 U	10 U	10 U		
	04/17/96		0.5 U	9.8	30	33		5 U	5 U	5 U	5 U	5 U		
	04/17/96	K	0.5 U	10	32	36		5 U	5 U	5 U	5 U	5 U		
	07/17/96		0.5 U	1 U	6.6	3.8		25 U	25 U	25 U	25 U	25 U		
	07/17/96	K	0.5 U	1 U	7.5	4.1		20 U	20 U	20 U	20 U	20 U		
	10/09/96		5 U	46	130	230		10 U	10 U	10 U	10 U	10 U		
	10/09/96	K	5 U	47	120	210		10 U	10 U	10 U	10 U	10 U		
	01/15/97		1 U	4.8	23	2 U		2 U	2 U	2 U	2 U	2 U		
	01/15/97	K	1 U	4.9	24	2 U		2 U	2 U	2 U	2 U	2 U		
	04/17/97		1 U	2 U	7.2	2.4		2 U	2 U	2 U	2 U	2 U		
	04/17/97	K	1 U	2 U	5.9	2.3		2 U	2 U	2 U	2 U	2 U		
	07/10/97		1.2 U	2.5 U	5.5	2.5 U		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		
	07/10/97	K	1.2 U	2.5 U	8.6	2.5 U		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		
	10/16/97		2.5 U	5 U	8.2	5 U		5 U	5 U	5 U	5 U	5 U		
	01/15/98		0.5 U	1 U	12	3.8		1 U	1 U	1 U	1 U	1 U		
	04/23/98		0.5 U	1 U	28	2.7		1 U	1 U	1 U	1 U	1 U		
	07/15/98		0.5 U	1 U	6	1.6		1 U	1 U	1 U	1 U	1 U		
	10/21/98		2.5 U	5 U	16	5 U		5 U	5 U	5 U	5 U	5 U		
	10/21/98	K	2.5 U	5 U	16	5 U		5 U	5 U	5 U	5 U	5 U		
	01/19/99		1 U	2 U	11	2 U		2 U	2 U	2 U	2 U	2 U		

Well Number	Sample Date	Sample Type	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
MW-16	01/15/93		120	79	2.5 U	2.5 U	11		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		61	2.5 U	2.5 U
	04/22/93		78	33	1 U	1 U	4.7		2.3 B	1 U	1 U	1 U	1 U	1 U		42	1 U	1 U
	07/14/93		21	17 J	20 U	100 U	20 U		20 U	17 J	20 U	20 U	20 U	20 U		18 J	20 U	20 U
	07/14/93	K	20 U	17 J	20 U	20 U	20 U		43 B	16 J	20 U	20 U	20 U	20 U		17 J	20 U	20 U
	10/14/93		33	11	1 U	1 U	5.5		1 U	1 U	1 U	1 U	1 U	1 U		26	1 U	1 U
	01/12/94		56	15	20 U	20 U	6.7		1 U	1 U	1 U	1 U	1 U	1 U		22	1 U	1 U
	01/12/94	K	53	14	2 U	2 U	5		2 U	2 U	2 U	2 U	2 U	2 U		19	2 U	2 U
	04/13/94		71	16	5 U	5 U	7.5		5 U	5 U	5 U	5 U	5 U	5 U		37	5 U	5 U
	04/13/94	K	83	20	5 U	5 U	7.4		5 U	5 U	5 U	5 U	5 U	5 U		46	5 U	5 U
	07/20/94		140	23	5 U	5 U	19		5 U	5 U	5 U	5 U	5 U	5 U		76	5 U	5 U
	07/20/94	K	130	23	5 U	5 U	17		5 U	5 U	5 U	5 U	5 U	5 U		76	5 U	5 U
	10/13/94		260	71	10 U	10 U	29		10 U	10 U	10 U	10 U	10 U	10 U		81	10 U	10 U
	10/13/94	K	290	72	10 U	10 U	29		10 U	10 U	10 U	10 U	10 U	10 U		82	10 U	10 U
	01/16/95		56	54	5 U	5 U	5 U		5 U	5 U	5 U	5 U	5 U	5 U		17	5 U	5 U
	01/16/95	K	80	57	5 U	5 U	5 U		5 U	5 U	5 U	5 U	5 U	5 U		19	5 U	5 U
	04/19/95		110	65	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U		34	10 U	10 U
	04/19/95	K	110	68	5 U	5 U	7.6		5 B	5 U	5 U	5 U	5 U	5 U		34	5 U	5 U
	07/13/95		97	90	5 U	5 U	13		5 U	5 U	5 U	5 U	5 U	5 U		47	5 U	5 U
	07/13/95	K	93	81	5 U	5 U	13		5 U	5 U	5 U	5 U	5 U	5 U		65	5 U	5 U
	10/11/95		230	74	10 U	10 U	22		10 U	10 U	10 U	10 U	10 U	10 U		60	10 U	10 U
	10/11/95	K	220	73	10 U	10 U	21		10 U	10 U	10 U	10 U	10 U	10 U		58	10 U	10 U
	02/01/96		130	140	10 U	10 U	14		10 U	10 U	10 U	10 U	10 U	10 U		28	10 U	10 U
	02/01/96	K	130	140	10 U	10 U	14		10 U	10 U	10 U	10 U	10 U	10 U		28	10 U	10 U
	04/17/96		170	97	5 U	5 U	7.3		5 U	5 U	5 U	5 U	5 U	5 U		38	5 U	5 U
	04/17/96	K	120	95	5 U	5 U	7.3		5 U	5 U	5 U	5 U	5 U	5 U		34	5 U	5 U
	07/17/96		230	100	25 U	25 U	25 U		25 U	25 U	25 U	25 U	25 U	25 U		110	25 U	25 U
	07/17/96	K	230	110	20 U	20 U	20 U		20 U	20 U	20 U	20 U	20 U	20 U		87	20 U	20 U
	10/09/96		340	98	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U		73	10 U	10 U
	10/09/96	K	330	98	10 U	10 U	11		10 U	10 U	10 U	10 U	10 U	10 U		71	10 U	10 U
	01/15/97		150	82	2 U	2 U	16		2 U	2.4	2 U	2 U	2 U	2 U		32	2 U	2 U
	01/15/97	K	170	87	2 U	2 U	21		2 U	2.8	2 U	2 U	2 U	2 U		38	2 U	2 U
	04/17/97		81	110	2 U	2 U	8.6		2 U	2 U	2 U	2.4	2 U	2 U		31	2 U	2 U
	04/17/97	K	75	97	2 U	2 U	6.1		2 U	2 U	2 U	2.2	2 U	2 U		30	2 U	2 U
	07/10/97		82	150	2.5 U	2.5 U	7.4		2.5 U	2.5 U	2.5 U	3.1	2.5 U	2.5 U		30	2.5 U	2.5 U
	07/10/97	K	79	150	2.5 U	2.5 U	7.3		2.5 U	2.5 U	2.5 U	3.1	2.5 U	2.5 U		31	2.5 U	2.5 U
	10/16/97		280	110	5 U	5 U	24		5 U	5 U	5 U	5 U	5 U	5 U		53	5 U	5 U
	01/15/98		92	57	1 U	1 U	13		1 U	2.4	1 U	1.8	1 U	1 U		29	1 U	1 U
	04/23/98		98	44	1 U	1 U	11		1 U	1 U	1 U	1.2	1 U	1 U		28	1 U	1 U
	07/15/98		81	57	1 U	1 U	8.8		1 U	1 U	1 U	1 U	1 U	1 U		29	1 U	1 U
	10/21/98		270	100	5 U	5 U	19		5 U	5.1	5 U	5 U	5 U	5 U		58	5 U	5 U
	10/21/98	K	230	100	5 U	5 U	17		5 U	5 U	5 U	5 U	5 U	5 U		52	5 U	5 U
	01/19/99		170	41	2 U	2 U	17		2 U	4.8	2 U	2 U	2 U	2 U		38	2 U	2 U

Table B-2
PhibroTech, Inc.
Historical Groundwater Analytical Results
Volatile Organic Compounds (VOCs) Analytical Summary

Well Number	Sample Date	Sample Type	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	Isopropyl-benzene	Chloro benzene	CCM	CFM	Chloro-ethane	Chloro-methane	cis-1,2-DCE
			Non-chlorinated					Chlorinated					
MW 16	01/15/99	K	2 U	2 U	11 U	2 U		2 U	2 U	2 U	2 U	2 U	
	04/15/99		2 U	2 U	8.1	2 U		2 U	2 U	2 U	4 U	4 U	13
	07/15/99		2 U	2 U	33	2 U		2 U	2 U	2 U	4 U	4 U	12
	10/15/99		5 U	5 U	5 U	10 U		5 U	5 U	5 U	10 U	10 U	41
	01/28/00		1 U	1 U	1 U	2 U		1 U	1 U	1 U	2 U	2 U	15
	04/15/00		2 U	2 U	2 U	2 U		2 U	2 U	2 U	4 U	4 U	7.6
	10/15/00		2.5 U	2.5 U	7	2.5 U		2.5 U	2.5 U	2.5 U	5 U	5 U	14
	04/15/01		2 U	2 U	39	11.6		2 U	2 U	2 U	4 U	4 U	8
	07/19/01		2.5 U	2.5 U	2.7	2.5 U		2.5 U	2.5 U	2.5 U	5 U	5 U	7.2
	10/18/01		2 U	2 U	41	2 U		2 U	2 U	2 U	4 U	4 U	14
	01/17/02		2 U	2 U	2 U	2 U		2 U	2 U	2 U	4 U	4 U	8.3
	04/18/02		2 U	2 U	2 U	4 U		2 U	2 U	2 U	4 U	4 U	6.6
	07/26/02		5 U	5 U	5 U	10 U		5 U	5 U	5 U	10 U	10 U	27
	10/24/02		2 U	2 U	2 U	4 U		2 U	2 U	2 U	4 U	4 U	20
	01/09/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	14
	04/24/03		0.5 U	1 U	8.3	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	6.1
	07/31/03		0.51	1 U	1.5	2 U	1 U	1 U	0.5 U	1	1 U	1 U	29
	10/22/03		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	25
	01/23/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	15
	04/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	10
	07/21/04		0.5 U	1 U	1 U	2 U	1 U	1 U	0.5 U	1 U	1 U	1 U	4.4

Sample Date	1,2-DBE	1,1-DCA	1,2-DCA	1,2-DCB	1,3-DCB	1,1-DCE	DCFM	MCL	trans-1,2-DCE	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	1,2,4-TCB	TCE	TFM	Vinyl chloride
01/15/99		180	42	2 U	2 U	17		2 U	4.7	2 U	2 U	2 U	2 U		30 U	2 U	2 U
04/15/99		180	41	2 U	2 U	20		2 U	3.4	2 U	2 U	2 U	2 U		39	4 U	4 U
07/15/99		130	28	2 U	2 U	13		2 U	3.2	2 U	22	2 U	2 U		29	4 U	4 U
10/15/99		220	26	5 U	5 U	30		5 U	6.4	5 U	5 U	5 U	5 U		42	10 U	10 U
01/28/00		88	7.5	1 U	1 U	14		1 U	3.4	1 U	1 U	1 U	1 U		18	2 U	2 U
04/15/00		97	7.4	2 U	2 U	11		2 U	2 U	2 U	2 U	2 U	2 U		28	4 U	4 U
10/15/00		130	43	2.5 U	2.5 U	10		2.5 U	2.6	2.5 U	2.5 U	2.5 U	2.5 U		38	5 U	5 U
04/15/01		97	75	2 U	2 U	11		2 U	2 U	2 U	2 U	2 U	2 U		38	4 U	4 U
07/19/01		72	180	2.5 U	2.5 U	7.3		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U		28	5 U	5 U
10/18/01		130	48	2 U	2 U	13		2 U	2.8	2 U	2 U	2 U	2 U		34	4 U	4 U
01/17/02		100	38	2 U	2 U	11		2 U	2 U	2 U	2 U	2 U	2 U		31	4 U	4 U
04/18/02		110	80	2 U	2 U	10		2 U	2 U	2 U	2 U	2 U	2 U		37	4 U	4 U
07/26/02		220	35	5 U	5 U	22		5 U	5.5	5 U	5 U	5 U	5 U		47	10 U	10 U
10/24/02		120	13	2 U	2 U	16		2 U	4.2	2 U	2 U	2 U	2 U		25	4 U	4 U
01/09/03	1 U	75	8.1	1 U	1 U	11	5 U	5 U	2.7	1 U	1.8	1 U	1 U	1 U	20	1 U	0.88
04/24/03	1 U	63	14	1 U	1 U	7	5 U	5 U	1.3	1 U	2.2	1 U	1 U	1 U	20	1 U	0.5 U
07/31/03	1 U	180	25	1 U	1 U	19	5 U	5 U	8.1	1 U	2.3	1 U	1 U	1 U	38	1 U	0.89
10/22/03	1 U	100	10	1 U	1 U	11	5 U	5 U	4.2	1 U	1.5	1 U	1 U	1 U	22	1 U	0.87
01/23/04	1 U	63	8.1	1 U	1 U	7.1	5 U	5 U	3.2	1 U	1.8	1 U	1 U	1 U	17	1 U	0.58
04/21/04	1 U	38	5.6	1 U	1 U	4.9	5 U	5 U	2.2	1 U	2	1 U	1 U	1 U	19	1 U	0.5 U
07/21/04	1 U	12	3.2	1 U	1 U	2	5 U	5 U	1	1 U	2	1 U	1 U	1 U	12	1 U	0.5 U

Notes

CCl4 = Carbon tetrachloride CFM = Chloroform DBE = Dibromoethane DCA = Dichloroethane, DCB = Dichlorobenzene DCE = Dichloroethene DCFM = Dichlorodifluoromethane MCL = Methylene chloride PCA = Tetrachloroethane, PCE = Tetrachloroethene TCA = Trichloroethane TCB = Trichlorobenzene TCE = Trichloroethene TFM = Trichlorofluorometha

All concentrations are reported in micrograms per liter (ug/L).
Only compounds detected in one or more samples are listed.
E = Indicates that the reported concentration is above the calibration range for the instrument. Concentration reported is an estimate only
F = Estimated value due to matrix interference
J = Indicates detected concentration is below analytical calibration curve and is below the official reporting limit. Concentration reported is an estimate only
U = Not detected at a concentration greater than the reporting limit shown.

Sample Type:
K = Split sample

Table F-2
Phibro-Tech, Inc.
Groundwater Analytical Results - October 2004
Appendix IX Summary of Detections

Well Number	Arsenic EPA 6010B (mg/L)	Barium EPA 6010B (mg/L)	Mercury EPA 7470A (mg/L)	Nickel EPA 6010B (mg/L)	Zinc EPA 6010B (mg/L)
MW-04	0.005 U	0.5	0.00098	0.01 U	0.14
MW-07	0.005 U	0.38	0.0002 U	0.01 U	0.13
MW-11	0.005 U	0.43	0.0002 U	0.01 U	0.11
MW-14S	0.0077	0.27	0.00068	0.01	0.23

Notes:

Of all of the Appendix IX parameters, only those with detections or value flags are shown.
All EPA 8260B analytical results are shown in Table 6-2.
All samples collected October 12, 2004

U = Not detected at a concentration greater than the reporting limit shown

Table [illegible]2
Phibro-Tech, Inc.
Groundwater Analytical Results - October 2003
Appendix IX Summary of Detections

Well Number	Sample Type	Acetophenone EPA 8270 (ug/L)	Arsenic EPA 6010B (mg/L)	Barium EPA 6010B (mg/L)	Mercury EPA 7470A (mg/L)	Nickel EPA 6010B (mg/L)	Selenium EPA 6010B (mg/L)	Thallium EPA 6010B (mg/L)	Zinc EPA 6010B (mg/L)
MW-04		0.13	0.015	0.44	0.0014	0.02 RL-1,U	0.01 RL-1,U	0.01 RL-1,U	0 046
	K	0.12	0.01 RL-3,U	0.26	0.00095	0.02 RL-3,U	0.01 RL-3,U	0.023	0.04 RL-3,U
MW-07		0.0099 U	0.005 U	0.11	0.0002 U	0.01 U	0.0065	0.005 U	0.02 U
MW-11		0 029	0.005 U	0.22	0.0002 U	0.01 U	0.005 U	0.005 U	0.13
MW-14S		0 0096 U	0.005 U	0.3	0.0002 U	0.016	0.005 U	0.005 U	0.096

Notes:

Of all of the Appendix IX parameters, only those with detections or value flags are shown.
All EPA 8260B analytical results are shown in Table 6-2.
All samples collected October 23, 2003

U = Not detected at a concentration greater than the reporting limit shown
RL-1 = Reporting Limit elevated due to sample matrix effects.
RL-3 = Reporting Limit elevated due to interference from other analytes.

Sample Type:
K = Split sample

Table G-2
Phibro-Tech, Inc.
Groundwater Analytical Results - October 2002
Appendix IX Summary of Detections

Well Number	Sample Type	Acetophenone	Arsenic	Barium	Bis (2-Ethylhexyl) Phthalate	Mercury	Selenium	Sulfide	Thallium	Zinc
MW-04		0 01 U	0 01 RL-3	0 34	0 005 J	0 0012	0 016	0 1 U	0 01 RL-3	0.04 RL-3
	K	0 01 U	0 01 RL-3	0 66	0 0058 J	0 0014	0 01 RL-3	0 1 U	0 01 RL-3	0 16
MW-07		0 01 U	0.005 U	0 4	0 0096 J	0 00039	0 0085	0 1 U	0.005 U	0.14
MW-11		0 01 U	0 005 U	0 32	0 078	0 0002 U	0 0078	0 19	0 005 U	0.16
MW-14S		0 026	0 011	0 42	0 006 J	0 0002 U	0 005 U	0 1 U	0.0074	0.13

Notes:
Of all of the Appendix IX parameters, only those with detections are shown.
All EPA 8260B analytical results are shown in Table 6-2.
All samples collected December 30, 2002
All concentrations reported in mg/L

U = Not detected at a concentration greater than the reporting limit shown
RL-3 = Reporting Limit elevated due to interference from other analytes.
Analyte not analyzed or not reported if left blank.

Sample Type:
K = Split sample

Table F-3
Phibro-Tech, Inc.
Groundwater Analytical Results - October 2004
Dioxins and Furans Analytical Summary

Well Number	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	OCDD	OCDF	Total EPA TEFs
MW-04	1.9 U	9.6 U	9.6 U	9.6 U	1.9 U	9.6 U	9.6 U	9.6 U	19 U	19 U	0
MW-07	2 U	10 U	10 U	14 J	2 U	10 U	10 U	10 U	20 U	78 J	0.078
MW-11	1.9 U	9.5 U	9.5 U	9.5 U	1.9 U	9.5 U	9.5 U	9.5 U	19 U	19 U	0
MW-14S	1.9 U	9.6 U	9.6 U	9.6 U	1.9 U	9.6 U	9.6 U	9.6 U	47 J	19 U	0.047

Notes:

Samples analyzed by EPA Method 8290.
All concentrations are reported in picograms per liter (parts per quadrillion).

TCDD = Tetrachlorodibenzo-p-dioxins, PeCDD = Pentachlorodibenzo-p-dioxins; HxCDD = Hexachlorodibenzo-p-dioxins; TCDF = Tetrachlorodibenzofurans;
PeCDF = Pentachlorodibenzofurans; HxCDF = Hexachlorodibenzofurans, HpCDF = Heptachlorodibenzofurans;
OCDD = 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin; OCDF = 1,2,3,4,6,7,8,9-octachlorodibenzofuran
TEF = Toxicity Equivalence Factor

EPA MCL for 2,3,7,8-TCDD (Dioxin) is 30 pg/L.

Data Flags.
J = Indicates detected concentration is below analytical calibration curve, and is below the official reporting limit. Concentration reported is an estimate only
U = Not detected at a concentration greater than the reporting limit shown.

Table G-3
Phibro-Tech, Inc.
Groundwater Analytical Results - October 2003
Dioxins and Furans Analytical Summary

Well Number	Sample Type	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	OCDD	OCDF	Total EPA TEFs
MW-04		2 4	3 6 U	2.3 U	3.6 U	2	1.9 U	1.5 U	2.3 U	6 7 U	5 2 U	7
	K	1 5	2 U	5 6	5 4	1 2	1 2 U	1 2 U	1.7 U	57 4 J	3.7 U	4 5
MW-07		2	2.9 U	2.6 J	40 3	1 5	1 4 U	1 3 U	5.3 J	267	15.4 J	6.2
MW 11		2 9	4 7 U	2 9 U	5 U	2 2	2 3 U	2 U	2 9 U	16 9 J	7 3 U	8 7
MW-14S		2 3	3 3 U	2 5 U	3 6 U	1.7	1.8 U	1.5 U	2.4 U	33 4 J	5 7 U	6.7

Notes.

Samples analyzed by EPA Method 8290
All concentrations are reported in picograms per liter (parts per quadrillion) with the exception of ToxicityEquivalents, which are unitless

TCDD = Tetrachlorodibenzo-p-dioxins, PeCDD = Pentachlorodibenzo-p-dioxins, HxCDD = Hexachlorodibenzo-p-dioxins; TCDF = Tetrachlorodibenzofurans;
PeCDF = Pentachlorodibenzofurans, HxCDF = Hexachlorodibenzofurans, HpCDF = Heptachlorodibenzofurans;
OCDD = 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin; OCDF = 1,2,3,4,6,7,8,9-octachlorodibenzofuran
TEF = Toxicity Equivalence Factor

EPA MCL for 2,3,7,8-TCDD (Dioxin) is 30 pg/L.

Data Flags.
J = Indicates detected concentration is below analytical calibration curve, and is below the official reporting limit. Concentration reported is an estimate only.
U = Not detected at a concentration greater than the reporting limit shown.

Sample Type:
K = Split sample

Table G-3
Phibro-Tech, Inc.
Groundwater Analytical Results - October 2002
Dioxins and Furans Analytical Summary

Well Number	Sample Type	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	OCDD	OCDF	Total PCDD Toxicity Equivs.	Total PCDF Toxicity Equivs.
MW-04		2 4 J	2 8	5 4 J	10	0 9 U	2 J	5	2	42 2 JB	5 6 JB	3 2	1 4
	K	3 5	3 3	14 6	18 1	6 4	8 6	18 2	11 6	56 6 JB	9.4 JB	6 5	6 6
MW-07		1 2 U	1 3 U	1 9	30 2	3 9	17 4 X	24.1 X	5.7	119 B	12.5 JB	2 7	2 9
MW-11		2 U	5 3	3 8 J	3 7	3.4 J	1 7 X	2 7	1.7	13 6 JB	2.1 U	2 6	1.2
MW-14S		1 6 U	2 U	1 6 U	14.1	3.3 X	2.4	7 4	3 3	48 5 JB	7.1 JB	3.2	2.7

Notes.

Samples analyzed by EPA Method 8290
All concentrations are reported in picograms per liter (parts per quadrillion) with the exception of ToxicityEquivalents, which are unitless.

Data Flags
B = Analyte detected in method blank and associated sample. Concentration in sample is less than 20 times that contained in method blank.
J = Indicates detected concentration is below analytical calibration curve, and is below the official reporting limit. Concentration reported is an estimate only
U = Not detected at a concentration greater than the reporting limit shown
X = Reported concentration contains positive interference caused by diphenyl ether in an amount believed to be greater than 10% of the reported concentration.

Sample Type
K = Split sample

Appendix H
Corrective Action Containment Systems Report

CDM

Corrective Action Containment Systems Report

Phibro-Tech, Inc.
Santa Fe Springs, California

July 22, 2003
Revision 3

Prepared by:

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8851 Dice Rd.
Santa Fe Springs, CA 90670
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SFS-05-007
Rev. 3

Introduction:

Section E.6.b. of the August 2, 1995 Corrective Action Permit Modification requires Phibro-Tech, Inc. Santa Fe Springs (PTISFS) to submit the Corrective Action Containment Systems (CACS) Report to the California Department of Toxic Substances Control (DTSC).

1. Purpose of the CACS Report:

The purpose of the CACS report is to:

1) evaluate the ability of the current system of sumps to contain contaminated runoff and chemical spills from the facility,

2) evaluate the ability of the existing site cover (paving) to prevent (for all practical purposes) infiltration of water into subsurface soils, and

3) describe proposed improvements to the facility that would prevent infiltration (for all practical purposes) into subsurface soils and contain contaminated runoff and chemical spills).

2. Appropriately Scaled Map

An appropriately scaled map is attached to this CACS Report as Figure 1, which illustrates all of the items to be discussed in this report, including:

- Property boundaries and site cover
- Pavement types for different portions of site cover
- Containment curbs and berms
- Directions of liquid flow across site cover
- Sumps and collection devices for liquids contained by site cover
- Facility process areas and equipment (including numbering of all tanks)
- Facility truck route and loading/unloading area
- Areas of liquid ponding

3. Baseline for the CACS Report:

This CACS Report was originally required pursuant to an August 2, 1995 Corrective Action Permit Modification from DTSC. The extent and condition of the of the site cover has changed since August 1995. Currently, all areas of the regulated portion of the facility are paved with asphalt, concrete, or concrete overlain by asphalt. All boundary areas of the site cover are contained by asphalt and/or concrete containment curbs or berms to prevent runoff. There are areas of the facility site cover which have been added or upgraded significantly (other than minor routine repair) since August 1995. These areas are listed below along with the dates the additions or upgrades were made:

- Southwest area of facility by laboratory (paved September 2001)
- Ferric chloride process area along west-southern boundary of facility (paved September 2001)
- Finished goods storage cells along north property boundary - extra cover added by cells over exiting concrete/asphalt site cover (October 2001)
- Containment curb along western boundary of swale - south of guard shack between main electrical panel and fence (February 2002)
- Traversible containment berm at west gate just north of laboratory (February 2002)

The baseline for preparation of this CACS Report is the existing condition of the site cover as of March 1, 2002.

4. Description of Site Cover

The entire regulated portion of the facility is covered by one of three combinations of paved covering: 4 inches asphalt by itself, 6-10 inches of concrete by itself, or 6-10 inches of concrete overlain by 3-4 inches of asphalt. For purposes of this CACS Report, the regulated portion of the facility does not include the areas east and southeast of the main entrance gate where the entrance road, main office trailer, and employee/visitor parking lot are located. However, the entrance road is covered with 6-10 inches of concrete and the main office trailer/parking lot area is paved with asphalt. These areas are separated from the regulated portion of the facility by a 4-6 inch concrete containment curb, except at the entrance gate opening, where there is a traversible concrete berm.

The majority of the regulated portion of the facility is covered with 6-10 inches of concrete overlain by 3-4 inches of asphalt. This includes all areas north of the facility truck route which runs east-west through the facility, and all areas south of the facility truck route except for two areas. The two exceptions are in the southwest corner of the facility by the laboratory, and directly east of the laboratory in the ferric chloride area. The laboratory area is covered with 4 inches of asphalt. The ferric chloride area is covered with 6-10 inches of concrete. The facility truck route itself is covered by 6-10 inches of concrete and is graded lower then the rest of the facility in order to contain any loading/unloading spills in the truck route area for cleanup.

The entire regulated and covered portion of the facility is bordered by a combination of curbs and berms in order to prevent any liquids from any source (chemical spills, rainfall, wash water, etc.) from flowing off of the site cover. As mentioned above, the eastern boundary of the regulated portion of the facility is separated from the entrance road and main office trailer/parking lot area by a 4-6 inch concrete containment curb, except at the entrance gate where there is a traversible concrete berm. The northeast boundary (bordering the Schnee-Morehead property) is bordered by a 4-6 inch concrete containment curb. The northern and western boundaries of the facility are bordered by a 4-6 inch concrete containment curb. The southern boundary of the regulated portion of the facility is bordered by an 8 inch asphalt containment berm.

5. Description of Current Site Drainage Collection System

The natural slope of the site is from North to South, with centrally located main street sumps that collects liquids. These street sumps are located in the area of the facility truck route adjacent to the drum and equipment cleaning area. The southwestern portion of the site has been modified in areas so that the terrain slopes north to the street sumps. Most of the site is sloped such that all liquids will collect in the street sumps. There are other sumps at the facility which collect liquids which do not flow to the central collection sump. The area south of hazardous waste container storage area ERS #1 slopes south and liquids in this area are collected by the maintenance sump.

The entire operating section of the site is bermed or curbed. This berming and curbing prohibits drainage onto Phibro-Tech's site from other sources.

6. Evaluation of Active Sumps and Associated Piping

A. Sumps

All sumps will be operated, maintained and inspected to prevent infiltration of liquids into the subsurface and contain chemical spills. The sumps will be inspected annually in accordance with the integrity inspection program described in section 6 of the Corrective Action Site Cover Operation, Maintenance, and Inspection Plan (CASCOMIP). All sumps will be maintained as necessary, based on observations made during the formal inspections.

The active sumps at PTI are as follows:

- Main sump – This sump is located between the copper oxide manufacturing and metals reclamation area. The sump captures process water from copper oxide, metals reclamation, and copper carbonate manufacturing. The sump is equipped with a float activated pump which transfers the water to the waste water treatment area, when a certain liquid level is reached in the sump. This sump holds approximately 1100 gallons.

- Maintenance Sump #4 – This sump is located west of the maintenance shop. This sump is used to capture liquids in the southeast section of the plant. The sump is equipped with a float activated pump which transfers the water to the waste water treatment area. The sump is equipped with a float activated pump which transfers the water to the waste water treatment area when a certain liquid level is reached in the sump. This sump holds approximately 500 gallons.

- Street Sumps (2) – These sumps are located between the copper oxide manufacturing and fresh etchant manufacturing area, and are connected with a double-wall fiberglass reinforced plastic (FRP) drain pipe. These sumps capture rain water for the northeast, northwest, and southwest areas of the plant. The sump is equipped with a float activated pump which transfers the water to the waste water treatment area, when a certain liquid level is reached in the sump. These sumps each hold approximately 360 gallons.

- Pipeline Sumps (2) – These sumps are located near the maintenance sump. They are connected by a passage way approximately 12 inches below the concrete surface. These sumps were not primarily installed to collect liquids, but rather as entrance points for a natural gas line and water line that runs under the road. Accumulated liquid in these sumps is handled as follows. A determination is made of the liquid (i.e. rainwater or accumulated waste) and a portable pump is used to remove the liquid. If the liquid is a waste, it is collected in a compatible container and processed in one of Phibro-Tech's waste processing units. If the liquid is rainwater, it is pumped to one of the rainwater storage areas. These sumps each hold approximately 5 gallons.

- Copper Oxide Sump – This sump is located inside the copper oxide containment area. The sump captures any spills inside the copper oxide area or accumulated rainwater. Accumulated liquid in this sump is handled as follows. A determination is made of the liquid (i.e. rainwater or accumulated waste) and a portable pump is used to remove the liquid. If the liquid is a waste, it is collected in a compatible container and processed in one of Phibro-Tech's waste processing units. If the liquid is rainwater, it is pumped to one of the rainwater storage areas. This sump holds approximately 100 gallons.

- Drum Wash Sump – This sump is located inside the drum washing containment system and is used to capture any spills in this area. The area has a roof over head, so all accumulated liquids in this sump are handled as wastes. Accumulated liquids are pumped to a compatible storage container using a portable pump and processed in one of Phibro-Tech's waste processing units. This sump holds approximately 360 gallons.

- Ferric Area Sumps – One sump is located inside the ferric chloride containment area and one is located in the product drum filling area. Accumulated liquid in these sumps is handled as follows. A determination is made of the liquid (i.e. rainwater or accumulated waste) and a portable pump is used to remove the liquid. If the liquid is a waste, it is collected in a compatible container and processed in one of Phibro-Tech's waste processing units. If the liquid is rainwater, it is pumped to one of the rainwater storage areas. One ferric chloride sump holds approximately 180 gallons and the other holds approximately 5 gallons.

- Wastewater Area Sump – This sump is located near the waste water containment area and is used to capture spills. Accumulated liquid in this sump is handled as follows. A determination is made of the liquid (i.e. rainwater or accumulated waste) and a portable pump is used to remove the liquid. If the liquid is a waste, it is collected in a compatible container and processed in one of Phibro-Tech's waste processing units. If the liquid is rainwater, it is pumped to one of the rainwater storage areas. This sump holds approximately 270 gallons.

B. Sump Integrity Testing

On an annual basis the sumps within the PTI facility will have an integrity test to verify that no leakage is occurring. The inspection steps are as follows.

a. The sump will be drained entirely of any liquids or solids. If necessary, power washing and/or steam cleaning will be used. Note: Any liquids or solids removed from the sumps will be analyzed and processed through the wastewater treatment system and/or characterized for appropriate onsite or offsite processing or disposal.

b. The sump will be dried by hand (with a cloth or rag) or with an air dryer.

c. Visually examine the sump liner. Note any cracks, bubbles, corrosion, or other sign of degradation.

d. Perform an integrity test using the following procedure:

    i. Fill the sump to the top with fresh water.

    ii. Allow the water to sit in the sump for four hours.

    iii. After four hours, inspect the sump. Note any signs of leakage such as bubbles or a water level decrease.

    iv. Pump the water to the waster water treatment plant.

The most recent annual integrity tests for all facility sumps were completed on March 6, 2002. All but one of the sumps passed the inspection with no signs of leakage. In one of the pipeline sumps (see list above), some leakage was reported during the integrity test This leakage was caused by some deteriorated concrete in the sump. During the 4 hour duration of the test, the water level in the sump dropped from 30 inches to 29.25 inches. the sump was emptied and the degraded concrete was repaired. The sump was completely re-tested and passed the integrity test. All sumps at the facility are now in good working order with no signs of leakage.

C. Associated Piping

All piping used to transfer accumulated liquids from sumps to the wastewater treatment system is above-ground and visually inspected. Therefore, any problems with the piping are able to be spotted and rectified quickly. The piping is also part of the facility's preventive maintenance program.

7. Description of Areas in Need of Repair

The overall condition of the site cover, including concrete-only paving and asphalt-only paving, is good. Some areas of ponding exist on the facility truck route near the central collection sump and are noted on the attached facility map. Some of the concrete in the ponding areas is etched to a point where concrete aggregate is exposed, however, the etching has not compromised the integrity of the concrete. PTISFS has already repaired the more etched areas with a granite encapsulated epoxy material. Within 3 months from the submittal of this CACS Report to DTSC, PTISFS will repair the areas adjacent to the rainwater street sump that have shown signs of degradation. The areas will be repaired with the same material which was used as an impermeable containment layer in the finished goods storage cells which were recently constructed along the north property boundary in the fall of 2001.

PTISFS will conduct monthly inspections of the non-RCRA permitted portions of the site cover to look for deterioration, cracks, settling, etc. Weekly inspections are conducted on the site cover in each of the two permitted hazardous waste container storage areas. Daily inspections are conducted on the site cover in each RCRA-permitted waste treatment area and hazardous waste storage tank area. Daily inspections are also conducted on the site cover in the truck loading and unloading areas, where spills are most likely to occur. These monthly, weekly, and daily procedures are described in Section 3 of the Corrective Action Site Cover Operation. Maintenance, and Inspection Report (CASCOMIP), submitted to DTSC on January 11, 2002.

8. Estimate of facility Area That Currently Drains Into Sumps

The entire regulated portion of the facility (the portion associated with industrial activity) drains into sumps for collection and transfer to the waste water treatment system. The regulated portion of the facility comprises 3.7 acres, or 163,000 square feet.

9. Estimate of Facility Area That Currently Drains Off Site

No liquids from any area of the facility associated with industrial activity currently drains off site due to the fact that the site cover is entirely contained by curbs and berms. To confirm this, PTI will inspect areas outside of the site cover and containment curbs and berms Visual inspections are made during and after each rainfall event. Other inspections are made as necessary, such as after an unplanned liquid release which might cause a significant amount of liquid to flow across the site cover.

10. Estimate of Current Run Off Storage Capacity

During the dry weather season, all liquids are collected into sumps at the facility and pumped via piping to the wastewater treatment system for treatment prior to discharge to the Los Angeles County Sanitation District (LACSD) under a permit. The capacity of the wastewater treatment system is 139,000 gallons, and this system ranges from 30% to 80% full at any given point in time.

During the wet weather season, an automatic diversion system will direct all collected rainwater to on site storage containers. The facility has three means of storing collected rainwater. First, the facility has three fiberglass-reinforced plastic (FRP) tanks situated along the west boundary of the facility, which together have a capacity of 72,000 gallons and are used for solely for storing rainwater. Second, the facility also has a 130,000 gallon water storage pond along the southern boundary of the facility which is used to store rainfall runoff during the wet season. Third, as needed during the wet season, PTISFS rents 20,000 gallon "Baker" tanks for storing rainwater. Phibro-Tech, Inc. has two suppliers of Baker tanks. One is Baker Tanks, and the other is MTI transportation. Both companies have committed to supplying Phibro-Tech with 21 Baker tanks over a 24 hour period, which would allow the plant to store a combined 622,000 gallons. This is more rain than would fall during a 24 hour, 100 year storm event.

The 24 hour, 100 year storm event in Los Angeles County would produce 6 inches of rain. Our processing area is 163,000 square feet, which would capture 81,500 cubic feet of rainwater (163,000 square feet x 0.5 feet of rain = 81,500 cubic feet of rain). This equates to approximately 610,000 gallons of rainwater, or 423 gallons per minute. Phibro-Tech's street sump pump is rated for 200 gpm. Asecondary pump exists on our main sump that could be used in conjunction with our street sump that is capable of pumping an additional 150 gpm. These two pumps at a combined 350 gpm have historically been able to handle all storm events, however a 24 hour, 100 year storm storm rate of 423 gpm would exceed the pump's rated capacity. As a contingency to address this possibility, Phibro-Tech maintains a 2 inch double diaphragm pump that could be installed in less than 30 minutes and provide an additional 75 gpm of pumping capability. The combined pumping rate with the three pumps would be 425 gpm, which could handle a 24 hour, 100 year storm.

The rainfall that is stored in the three FRP tanks. the water storage pond, and the Baker tanks is used as process wash water and offsets the use of city tap water. The stored rainwater is stored until needed in the plant's processes. The average daily usage rate of the captured rainwater is 15,000 gallons. In theory, a 24 hour. 100 year storm event totaling 610,000 gallons of water would take 41 working days to be used in the plant's processes.

11. Activities and Locations Which Involve Transit of Waste and Non-Waste Through or Into Below-Grade Conduits, Collection or Storage Devices, and Areas of Residual Soil Contamination

All sumps at the facility are situated below grade. An integrity test is performed annually on each sump to ensure they are not leaking. The two sumps along the main facility truck route both have below grade conduits which run underneath the roadway. This allows liquids from both sides of the roadway to reach the sump and be collected for transfer to the waste water treatment system or other liquid containment (FRP tanks, rainwater storage pond, or Baker tanks).

There are no areas of residual soil contamination known to PTISFS at this time which have resulted from either leaking below-grade conduits, or off site migration of liquids from the site cover. Soil and groundwater underneath various locations at the facility is contaminated with metals and organic compounds. The soil underneath the facility was delineated pursuant to a RCRA Facility Investigation dated February 4, 1993. This soil and groundwater contamination is being addressed under separate efforts between PTISFS and the DTSC pursuant to the August 2, 1995 Corrective Action Permit Modification.

12. Spatial Relationship Between Waste and Non-Waste Water Crossing Through or Into Below Grade Conduits, Collection or Storage Devices, and Areas of Residual Soil Contamination

All waste which comes into the facility to be treated is handled and transferred in separate piping from any liquids or rainfall that is contained by the site cover and transferred to the wastewater treatment system or other liquid containment. All liquids at the facility are piped to the facility wastewater treatment system for proper treatment before any permitted discharge to LACSD.

There are no areas of residual soil contamination known to PTISFS at this time which have resulted from either leaking below-grade conduits or off site migration of liquids from the site cover. Soil and groundwater underneath various locations at the facility is contaminated with metals and organic compounds. The soil underneath the facility was delineated pursuant to a RCRA Facility Investigation dated February 4, 1993. This soil and groundwater contamination is being addressed under separate efforts between PTISFS and the DTSC pursuant to the August 2, 1995 Corrective Action Permit Modification.

13. Description of Current Contingency procedures to Address Heavy Run-Off Periods

As described in Section 10 above, PTISFS possesses 3 FRP tanks with a total capacity of 72,000 gallons, as well as a 130,00 gallon rainwater storage pond, both of which are available to be used year round. During the wet season, PTISFS also rents portable Baker tanks of varying capacities as needed for extra rainfall storage. These Baker tanks are removed from the facility at the conclusion of the wet season. PTISFS is able to pump liquids from the site cover into liquid containment at a rate of 200 gallons per minute. This pumping rate is more than adequate to contain even the heaviest rainfall events in the Los Angeles area.

14. Evaluation of Current Drainage Collection Systems Ability to Contain Off-Site Run-Off

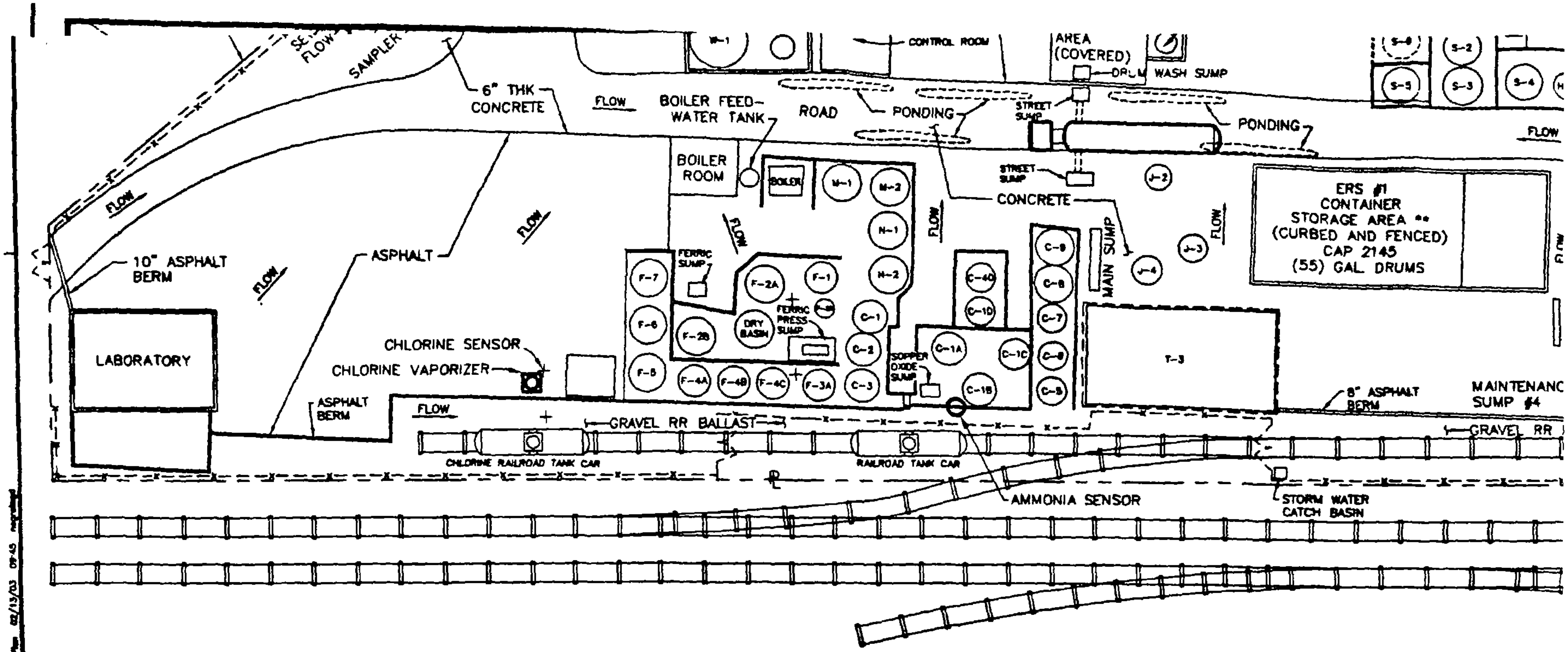
The current site cover and drainage collection system prevents all on site liquids from migrating off site. As mentioned in Section 9, visual inspections are made during and after each rainfall event. Other inspections are made as necessary, such as after an unplanned liquid release which might cause a significant amount of liquid to flow across the site cover.

15. Evaluation of Ability of Current Site Cover to Prevent Infiltration Into Subsurface

Based on the descriptions of the site cover and containment berms and curbs provided in this report, the current site cover is sufficiently thick and in good condition to prevent infiltration of liquids into the subsurface soils.

16. Description of Proposed Improvements to the Facility That Would prevent Infiltration Into Subsurface Soils and Contain Site Run-Off

PTISFS believes that the current good condition of the site cover, as well as the containment of the entire regulated portion of the facility by berms and curbs, is sufficient to prevent infiltration of liquids into subsurface soils and contain on site stormwater. As mentioned in Section 7, additional repairs will be made to etched areas of concrete in the main facility truck route in the next 3 months. Otherwise, no other improvements other than routine maintenance are planned or necessary at this time.

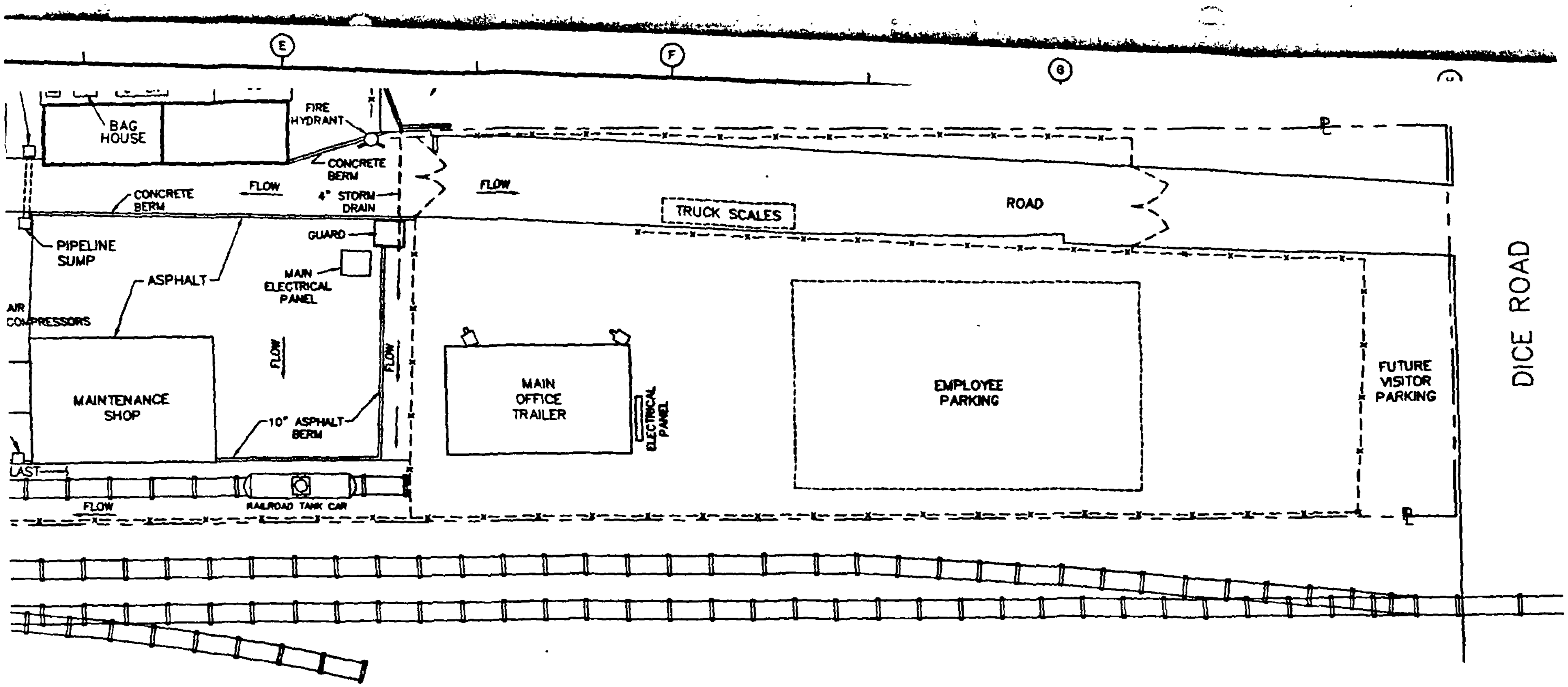


SITE PLAN

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:
DRAWN BY:
SHEET CHK'D BY:
CROSS CHK'D BY:
APPROVED BY:
DATE:

CDM Camp Dresser & McKee Inc.
18881 Von Karman Avenue
Suite 650
Irvine, California 92612
(714) 752-5452 Fax (714) 752-1307



UPDATED: 12
UPDATED: 1-

NOTE:
BASE MAP PROVIDED BY COORY ENGINEERING.

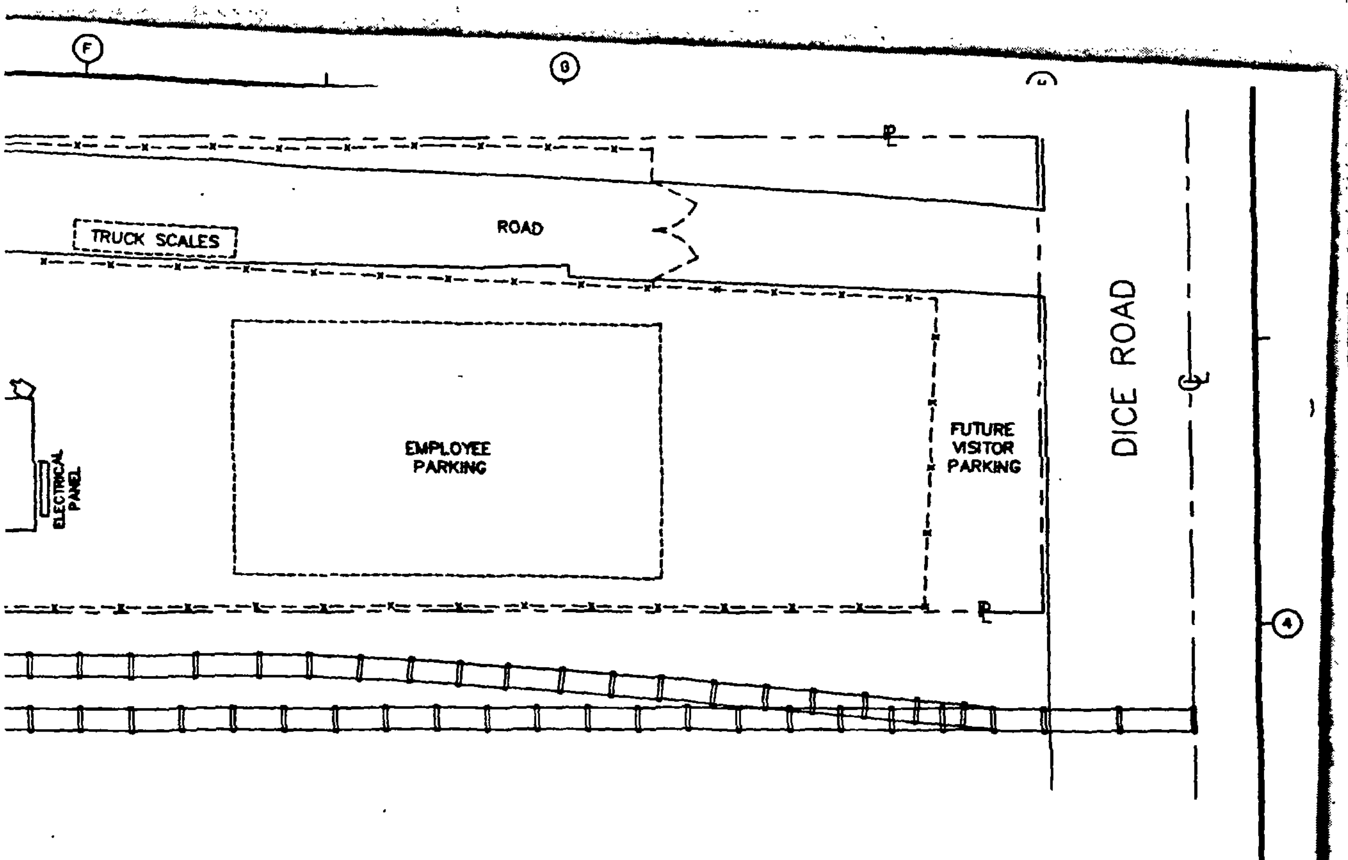
PHIBRO-TECH, INC
8851 DICE ROAD, SANTA FE SPRINGS, CALIFORNIA

EXISTING SITE PLAN
WITH SECONDARY CONTAINMENT FEATURES
AND DRAINAGE PATTERNS

PROJECT NO.
FILE NAME: M-400.

SHEET NO

Figure



NOTE:
BASE MAP PROVIDED BY COORY ENGINEERING.

UPDATED: 12-17-01
UPDATED: 1-15-96

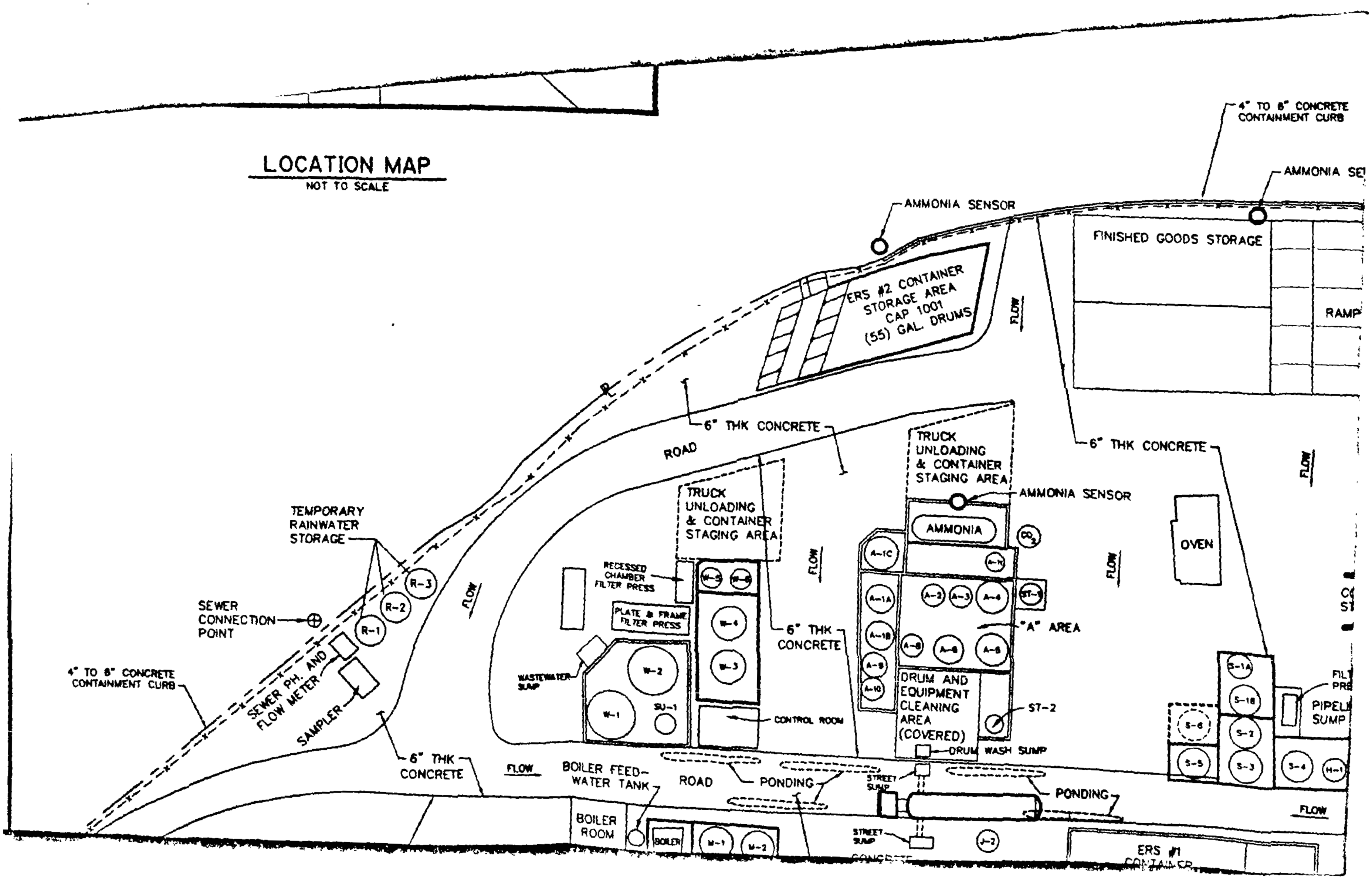
EXISTING SITE PLAN WITH SECONDARY CONTAINMENT FEATURES AND DRAINAGE PATTERNS

PROJECT NO.
FILE NAME: M-400.dwg

SHEET NO.
Figure 1

LOCATION MAP

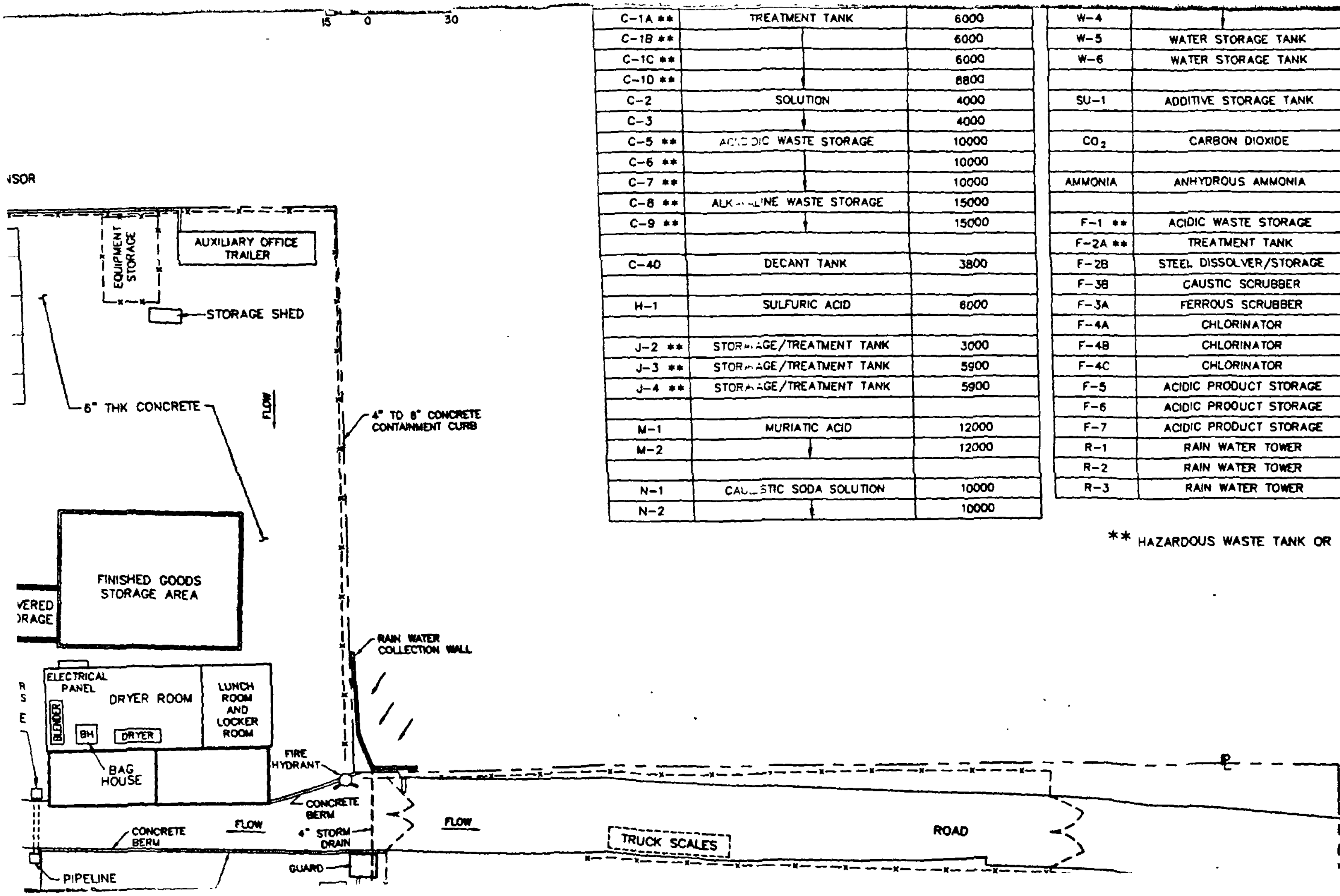
NOT TO SCALE

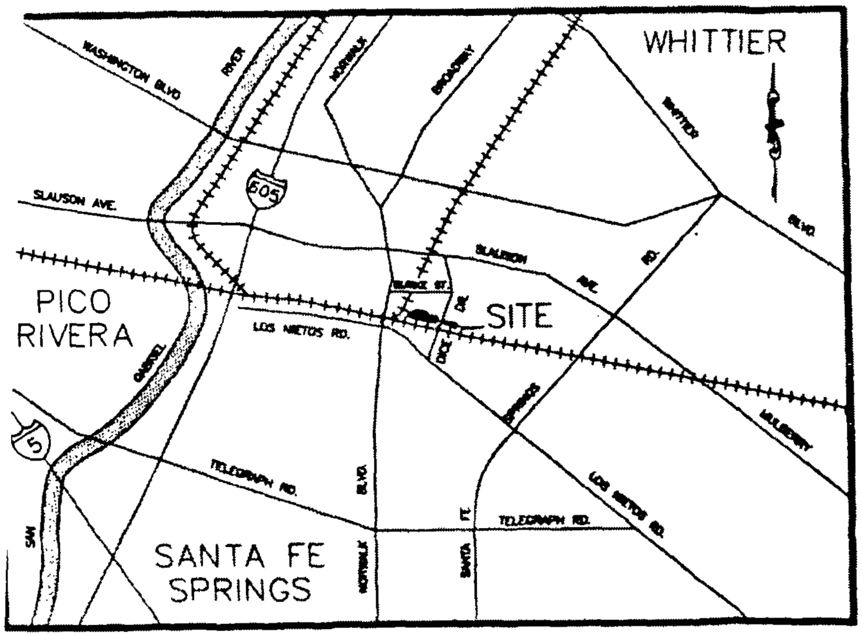


C-1A **	TREATMENT TANK	6000
C-1B **		6000
C-1C **		6000
C-1D **		8800
C-2	SOLUTION	4000
C-3		4000
C-5 **	ACIDIC WASTE STORAGE	10000
C-6 **		10000
C-7 **		10000
C-8 **	ALKALINE WASTE STORAGE	15000
C-9 **		15000
C-40	DECANT TANK	3800
H-1	SULFURIC ACID	8000
J-2 **	STORAGE/TREATMENT TANK	3000
J-3 **	STORAGE/TREATMENT TANK	5900
J-4 **	STORAGE/TREATMENT TANK	5900
M-1	MURIATIC ACID	12000
M-2		12000
N-1	CAUSTIC SODA SOLUTION	10000
N-2		10000

W-4		12500
W-5	WATER STORAGE TANK	2200
W-6	WATER STORAGE TANK	2200
SU-1	ADDITIVE STORAGE TANK	1000
CO_2	CARBON DIOXIDE	52000
AMMONIA	ANHYDROUS AMMONIA	12000
F-1 **	ACIDIC WASTE STORAGE	10500
F-2A **	TREATMENT TANK	4200
F-2B	STEEL DISSOLVER/STORAGE	10000
F-3B	CAUSTIC SCRUBBER	1000
F-3A	FERROUS SCRUBBER	5000
F-4A	CHLORINATOR	6000
F-4B	CHLORINATOR	6000
F-4C	CHLORINATOR	6000
F-5	ACIDIC PRODUCT STORAGE	15000
F-6	ACIDIC PRODUCT STORAGE	15000
F-7	ACIDIC PRODUCT STORAGE	15000
R-1	RAIN WATER TOWER	21138
R-2	RAIN WATER TOWER	25366
R-3	RAIN WATER TOWER	25366

** HAZARDOUS WASTE TANK OR AREA.



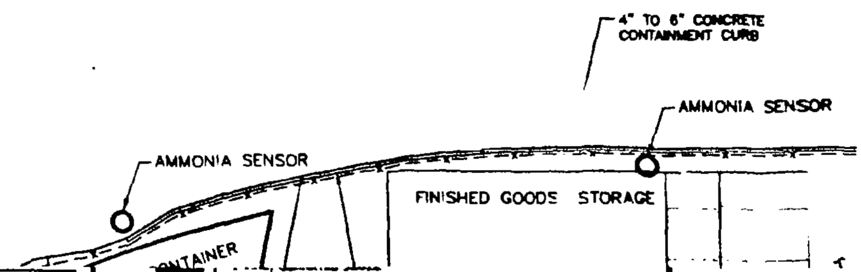


LOCATION MAP

NOT TO SCALE

LEGEND

---- PL ----	PROPERTY LINE
——x——x——x——	FENCE LINE
	SURVEILLANCE CAMERA
	TRUCK LOADING/UNLOADING AREA

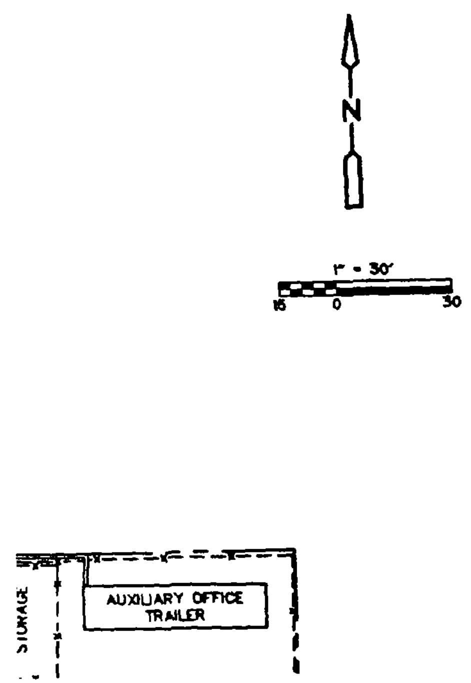


(714) 752-5452 Fax: (714) 752-1307

REV. NO.	DATE	DRWN	CHKD	REMARKS

APPROVED BY: ____________

DATE: ____________



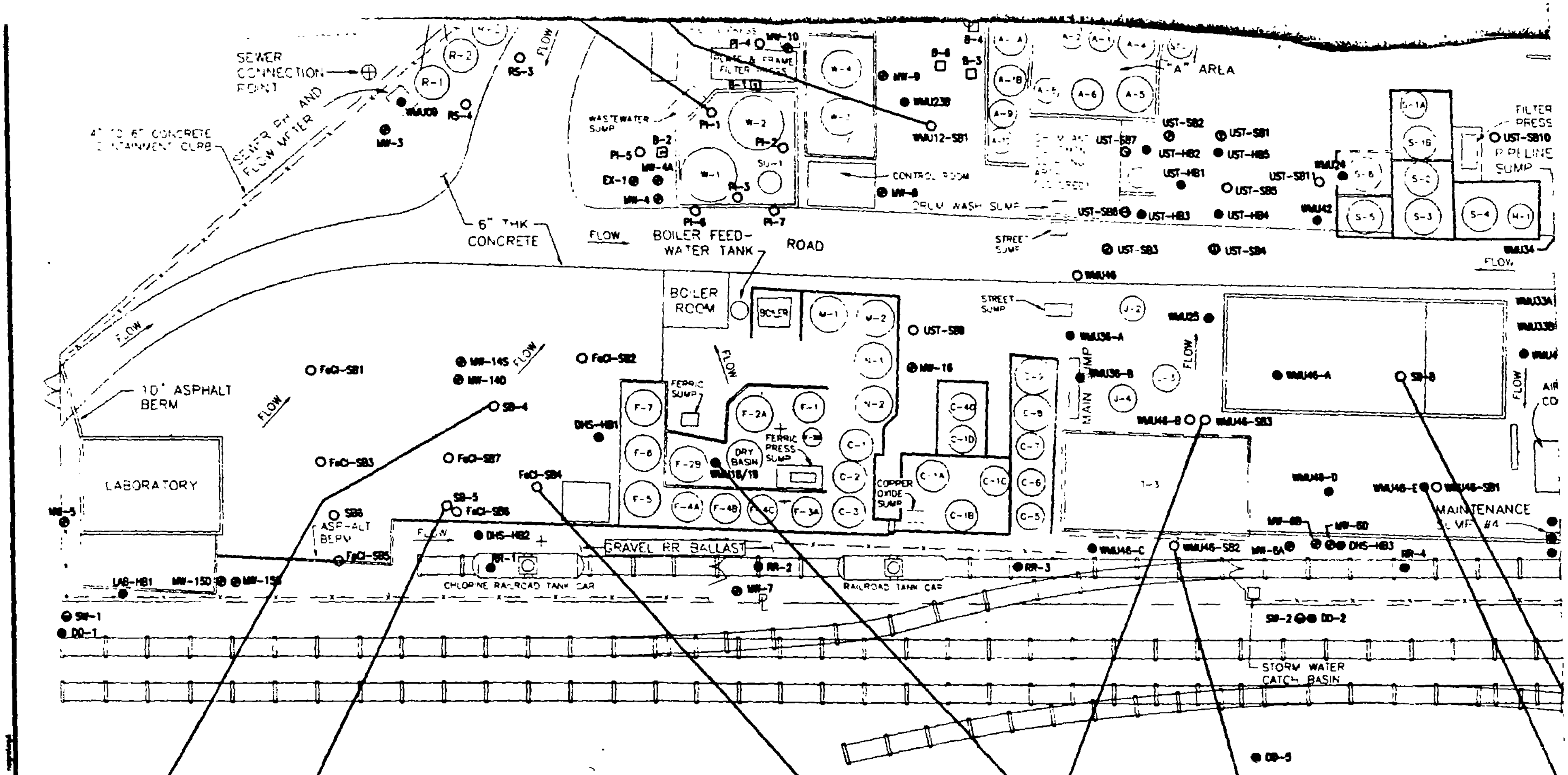
TANK SUMMARY

TANK No	PRODUCT	CAPACITY (GAL.)
A-1A	10% AQUA AMMONIA SOLUTION	8000
A-1B		8000
A-1C		8000
A-2		10000
A-3		6000
A-4		13000
A-5		10575
A-6		6000
A-8	SCRUBBER AND PUMP TANK	8000
A-9	SOLUTION	12000
A-10		4500
A-11	SCRUBBER AND PUMP TANK	10000
C-1	AMMONIA RECOVERY	8000
C-1A **	TREATMENT TANK	6000
C-1B **		6000
C-1C **		6000
C-1D **		8800
C-2	SOLUTION	4000
C-3		4000
C-5 **	ACIDIC WASTE STORAGE	10000
C-6 **		10000
C-7 **		10000
C-8 **	ALKALINE WASTE STORAGE	15000
C-9 **		15000
C-40	DECANT TANK	3800

TANK No.	PRODUCT	CAPACITY (GAL.)
S-1A **	INORGANIC MIX TANK	6400
S-1B **		6400
S-2	INORGANIC SOLUTION	9300
S-3 **		12000
S-4		12000
S-5 **		10000
ST-1	PRODUCT MIX TANK	3100
ST-2	PRODUCT MIX TANK	1000
T-3	WATER STORAGE	130000
W-1	WATER TREATMENT TANK	30000
W-2		30000
W-3		12500
W-4		12500
W-5	WATER STORAGE TANK	22000
W-6	WATER STORAGE TANK	22000
SU-1	ADDITIVE STORAGE TANK	1000
CO_2	CARBON DIOXIDE	52000#
AMMONIA	ANHYDROUS AMMONIA	12000
F-1 **	ACIDIC WASTE STORAGE	10500
F-2A **	TREATMENT TANK	4200
F-2B	STEEL DISSOLVER/STORAGE	10000
F-3B	CAUSTIC SCRUBBER	1000

AND DRAINAGE PATTERNS

Figure 1



SB-4	
	TCE
6'	90

SB-5	
	TCE
5.5'	125

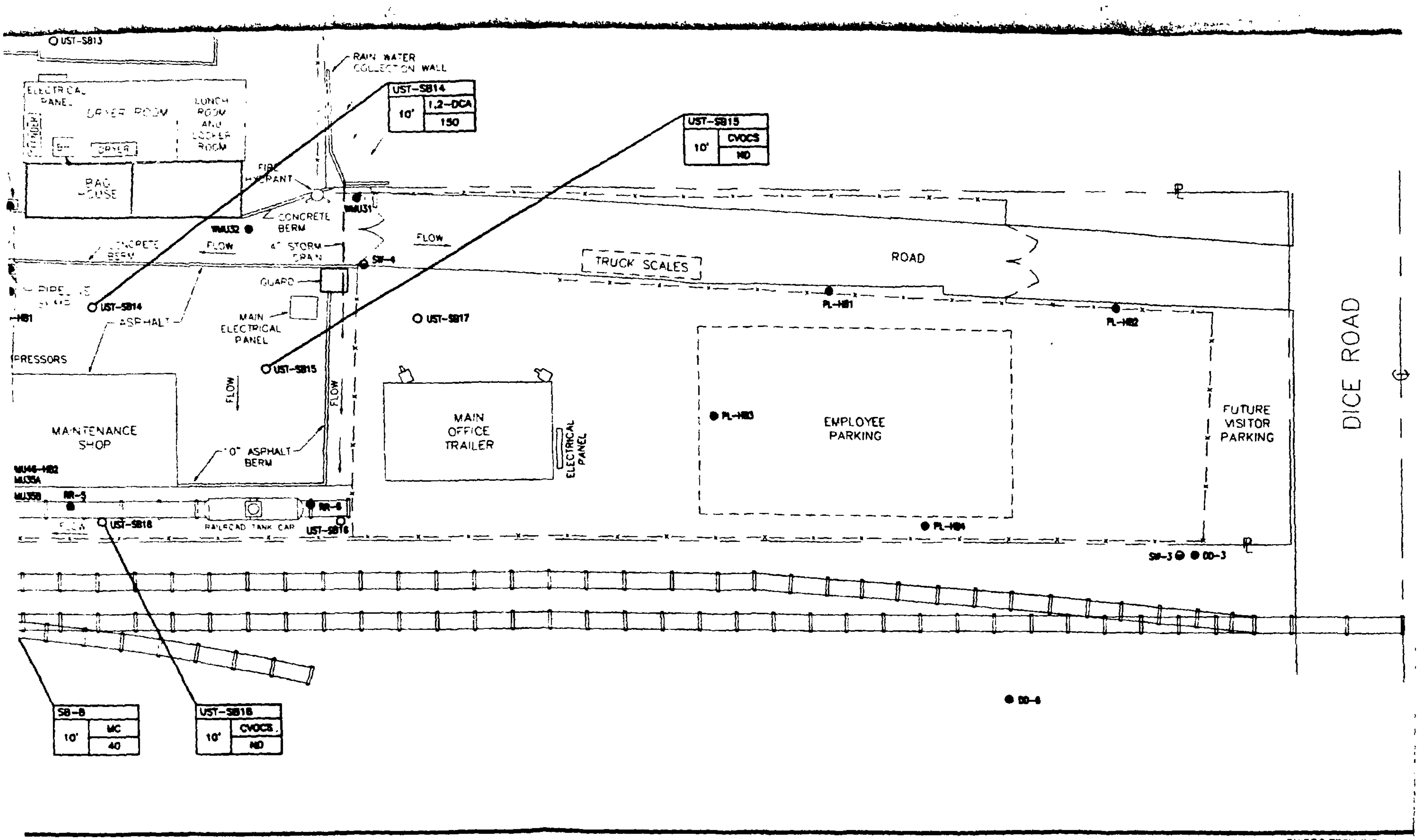
FeCl-SB4						
	TCE	PCE	1,2-DCE	MC	Acetone	2-Butanone
0.5'	ND	ND	ND	9	ND	ND
5.5'	110	11	8	10	38	11
11'	ND	ND	ND	8	ND	ND

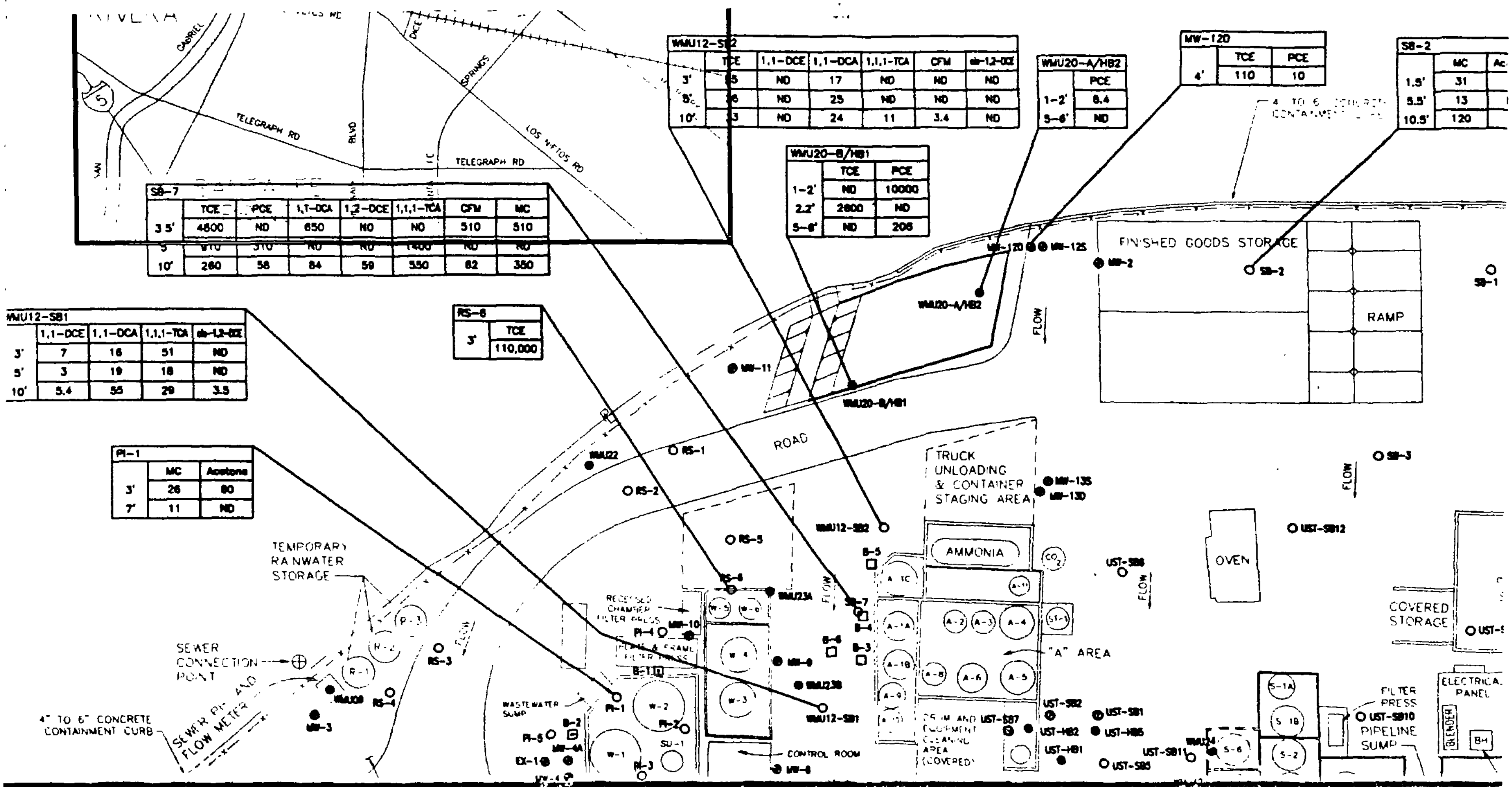
WMU18/19		
	TCE	Acetone
1-2'	9	ND
3-4'	ND	120

WMU46-SB3	
	CVOCS
10'	ND

WMU46-SB2	
	CVOCS
6'	ND
10'	ND

WMU46-E	
	MC
3.5'	28


UST-SB13
RAIN WATER COLLECTION WALL
UST-SB14
10'
1,2-DCA
150
UST-SB15
10'
CVOCS
ND
ELECTRICAL PANEL
DRYER ROOM
LUNCH ROOM AND LOCKER ROOM
BAG HOUSE
FIRE HYDRANT
WMU31
WMU32
CONCRETE BERM
FLOW
4" STORM DRAIN
TRUCK SCALES
ROAD
SW-4
GUARD
MAIN ELECTRICAL PANEL
UST-SB14
ASPHALT
UST-SB17
PL-HB1
PL-HB2
PRESSORS
UST-SB15
MAINTENANCE SHOP
"0" ASPHALT BERM
MAIN OFFICE TRAILER
ELECTRICAL PANEL
PL-HB3
EMPLOYEE PARKING
FUTURE VISITOR PARKING
DICE ROAD
RR-5
RR-6
RAILROAD TANK CAR
UST-SB18
UST-SB16
PL-HB4
SW-3
DD-3
DD-4
SB-8
10'
MC
40
UST-SB18
10'
CVOCS
ND



WMU12-SB2

	TCE	1,1-DCE	1,1-DCA	1,1,1-TCA	CFM	cis-1,2-DCE
3'	[illegible]	ND	17	ND	ND	ND
8'	[illegible]	ND	25	ND	ND	ND
10'	[illegible]	ND	24	11	3.4	ND

WMU20-A/HB2

	PCE
1-2'	8.4
5-6'	ND

MW-120

	TCE	PCE
4'	110	10

SB-2

	MC	Ac
1.5'	31	
5.5'	13	
10.5'	120	

WMU20-B/HB1

	TCE	PCE
1-2'	ND	10000
2.2'	2800	ND
5-6'	ND	206

SB-7

	TCE	PCE	1,1-DCA	1,2-DCE	1,1,1-TCA	CFM	MC
3.5'	4600	ND	650	ND	ND	510	510
5'	[illegible]	310	ND	ND	1400	ND	ND
10'	260	58	84	59	550	62	350

WMU12-SB1

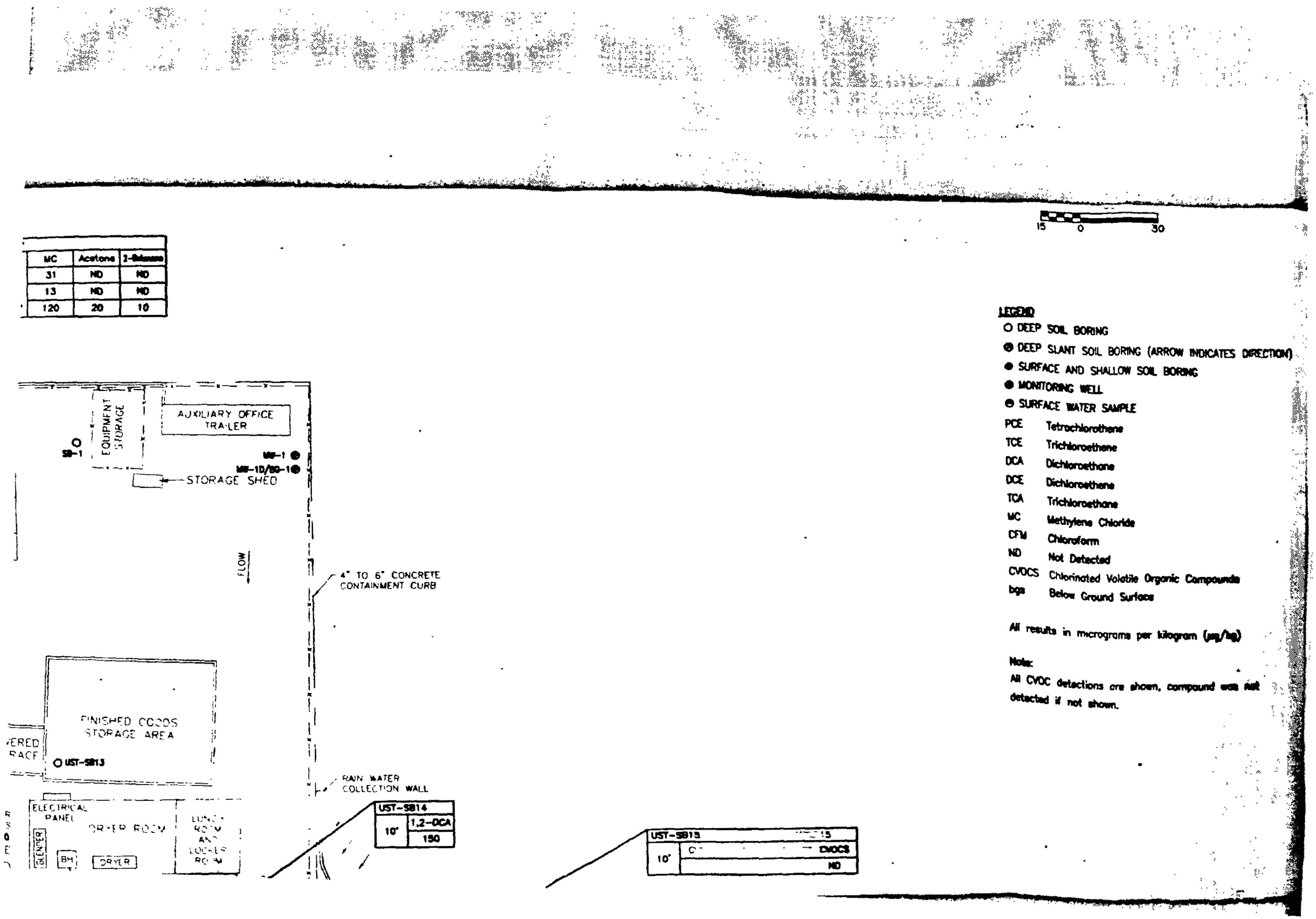
	1,1-DCE	1,1-DCA	1,1,1-TCA	cis-1,2-DCE
3'	7	16	51	ND
5'	3	19	18	ND
10'	5.4	55	29	3.5

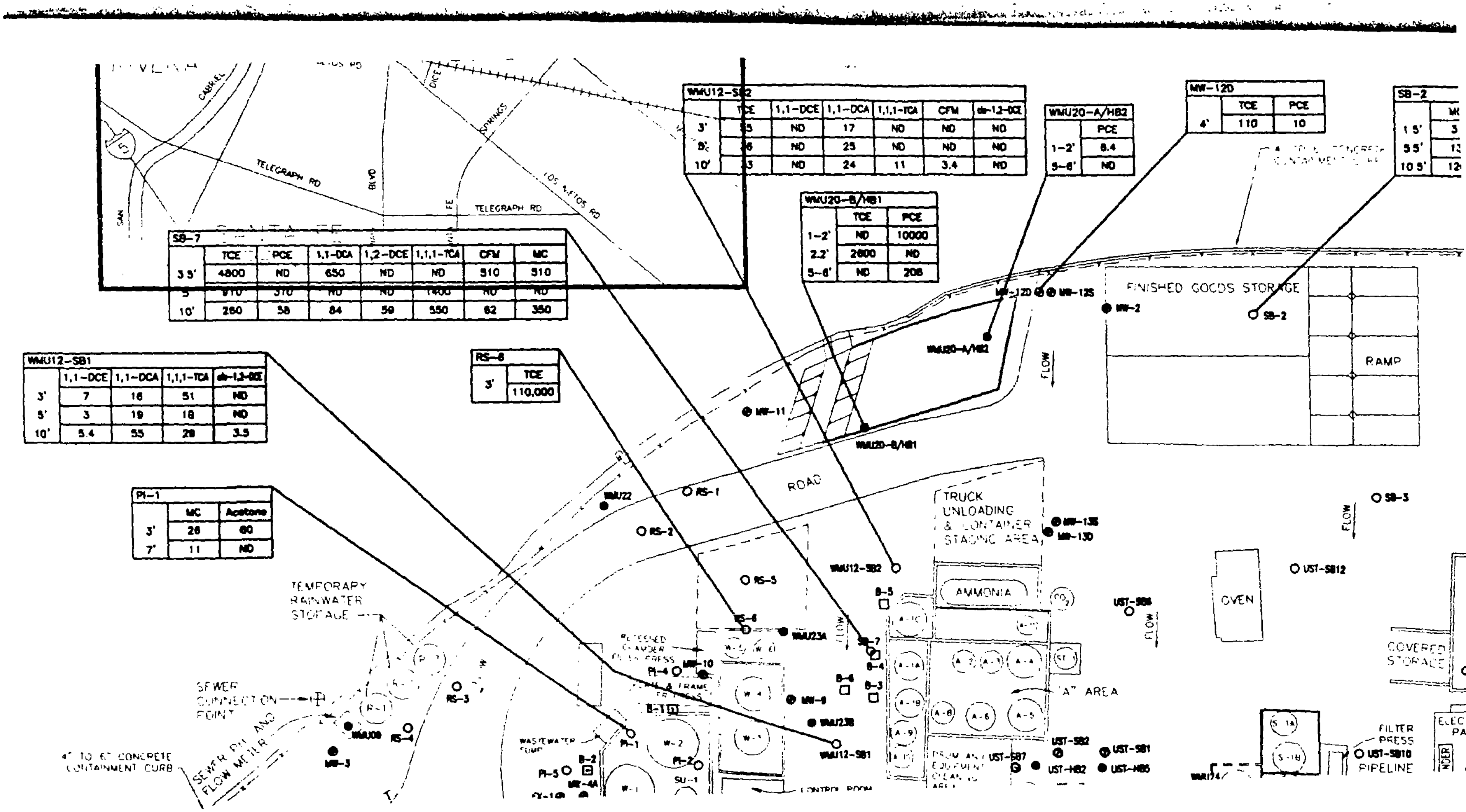
RS-6

	TCE
3'	110,000

PI-1

	MC	Acetone
3'	26	80
7'	11	ND


15 0 30
MC
Acetone
2-Butanone
31 ND ND
13 ND ND
120 20 10
LEGEND
DEEP SOIL BORING
DEEP SLANT SOIL BORING (ARROW INDICATES DIRECTION)
SURFACE AND SHALLOW SOIL BORING
MONITORING WELL
SURFACE WATER SAMPLE
PCE Tetrachloroethene
TCE Trichloroethene
DCA Dichloroethane
DCE Dichloroethene
TCA Trichloroethane
MC Methylene Chloride
CFM Chloroform
ND Not Detected
CVOCS Chlorinated Volatile Organic Compounds
bgs Below Ground Surface
All results in micrograms per kilogram (µg/kg)
Note:
All CVOC detections are shown, compound was not detected if not shown.
EQUIPMENT STORAGE
AUXILIARY OFFICE TRAILER
SB-1
MW-1
MW-1D/SB-1
STORAGE SHED
FLOW
4" TO 6" CONCRETE CONTAINMENT CURB
FINISHED GOODS STORAGE AREA
UST-SB13
RAIN WATER COLLECTION WALL
ELECTRICAL PANEL
DRYER ROOM
LUNCH ROOM AND LOCKER ROOM
BLENDER
BH
DRYER
UST-SB14
10'
1,2-DCA
150
UST-SB15
10'
CVOCS
ND



WMU12-SB2	TCE	1,1-DCE	1,1-DCA	1,1,1-TCA	CFM	cis-1,2-DCE
3'	55	ND	17	ND	ND	ND
5'	56	ND	25	ND	ND	ND
10'	33	ND	24	11	3.4	ND

WMU20-A/HB2	PCE
1-2'	8.4
5-6'	ND

MW-12D	TCE	PCE
4'	110	10

SB-2	MC
1.5'	3
5.5'	13
10.5'	12

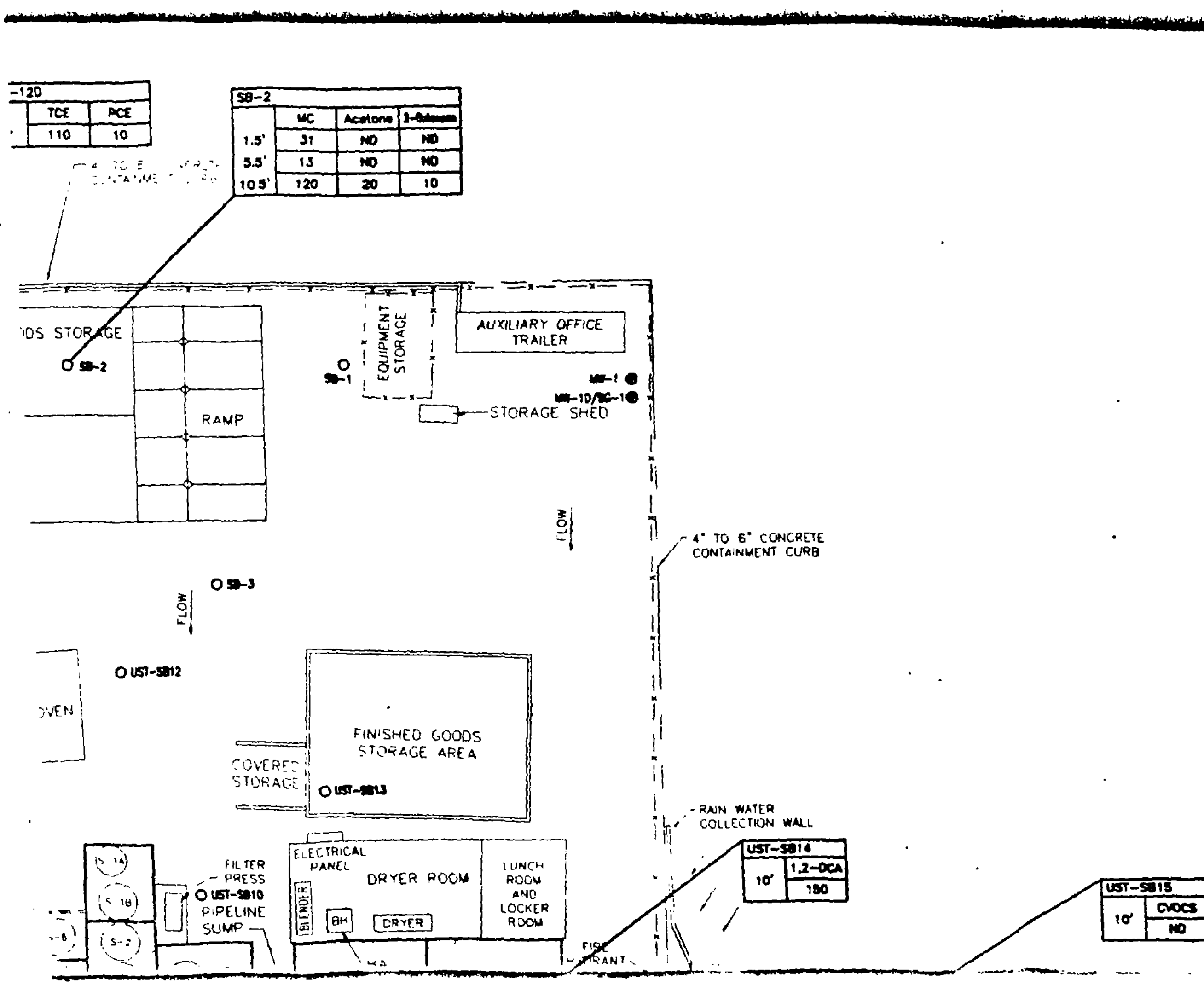
WMU20-B/HB1	TCE	PCE
1-2'	ND	10000
2.2'	2800	ND
5-6'	ND	206

SB-7	TCE	PCE	1,1-DCA	1,2-DCE	1,1,1-TCA	CFM	MC
3.5'	4800	ND	650	ND	ND	510	510
5'	910	310	ND	ND	1400	ND	ND
10'	260	58	84	59	550	62	350

WMU12-SB1	1,1-DCE	1,1-DCA	1,1,1-TCA	cis-1,2-DCE
3'	7	16	51	ND
5'	3	19	18	ND
10'	5.4	55	28	3.5

RS-6	TCE
3'	110,000

PI-1	MC	Acetone
3'	26	60
7'	11	ND

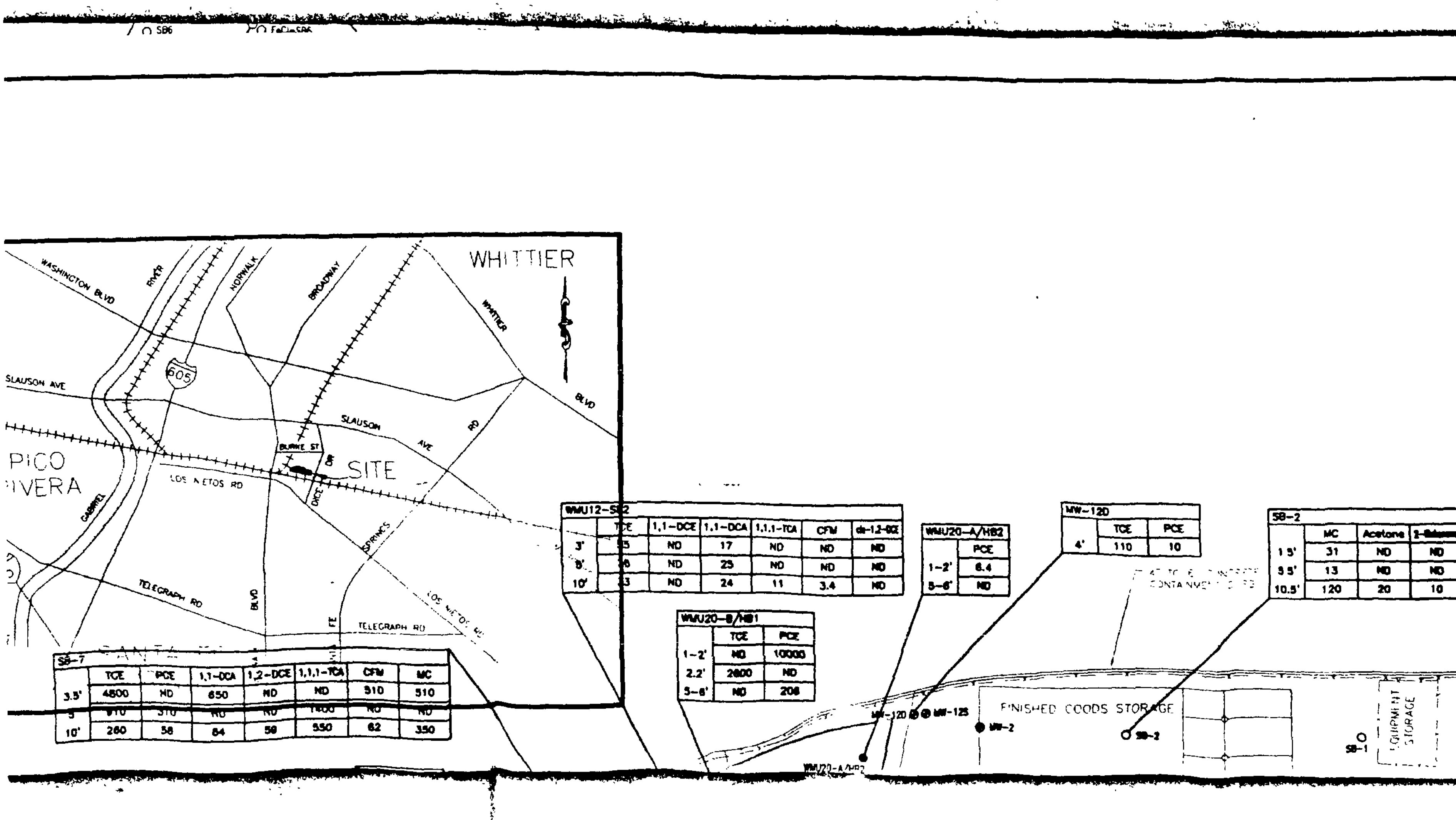


LEGEND
- O DEEP SOIL BORING
- ⊘ DEEP SLANT SOIL BORING (ARROW INDICATES DIRECT
- ● SURFACE AND SHALLOW SOIL BORING
- ⊕ MONITORING WELL
- ⊖ SURFACE WATER SAMPLE

PCE	Tetrachloroethene
TCE	Trichloroethene
DCA	Dichloroethane
DCE	Dichloroethene
TCA	Trichloroethane
MC	Methylene Chloride
CFM	Chloroform
ND	Not Detected
CVOCS	Chlorinated Volatile Organic Compounds
bgs	Below Ground Surface

All results in micrograms per kilogram (µg/kg)

Note:
All CVOC detections are shown, compound was not detected if not shown.



SB-7	TCE	PCE	1,1-DCA	1,2-DCE	1,1,1-TCA	CFM	MC
3.5'	4800	ND	650	ND	ND	510	510
5'	910	310	ND	ND	1400	ND	ND
10'	260	58	84	59	550	62	350

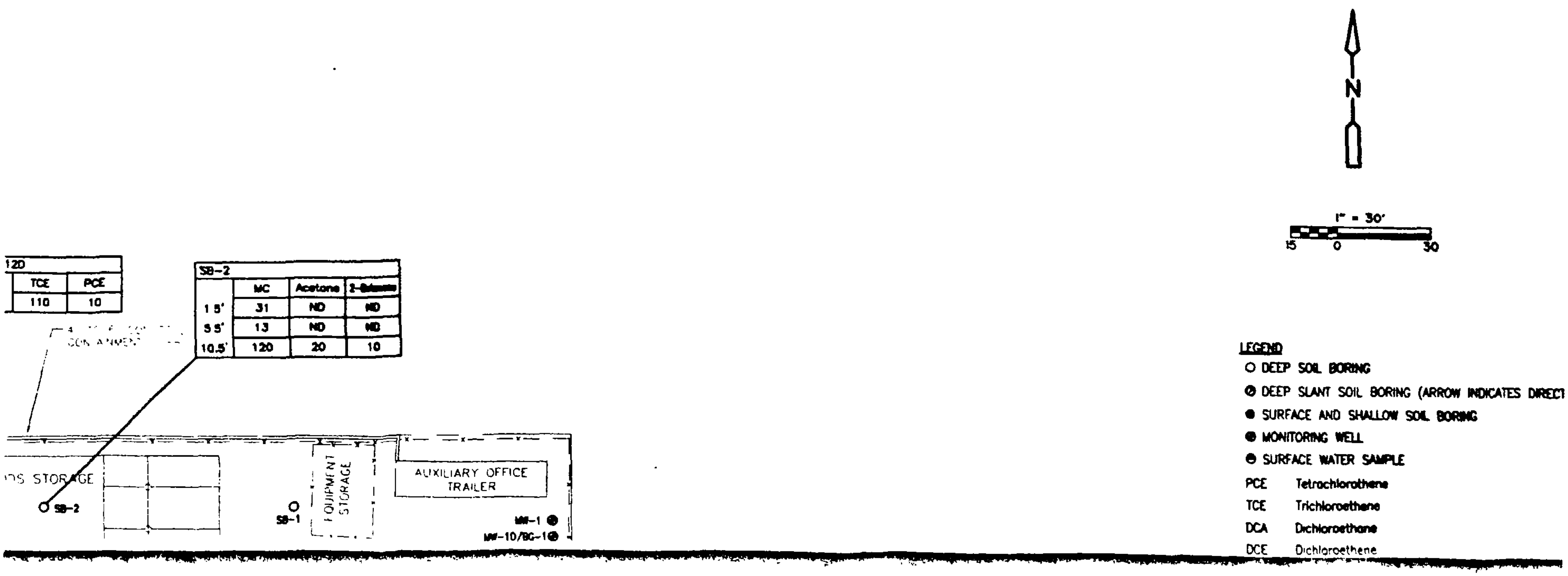
WMU12-SB2	TCE	1,1-DCE	1,1-DCA	1,1,1-TCA	CFM	cis-1,2-DCE
3'	[illegible]5	ND	17	ND	ND	ND
8'	[illegible]6	ND	25	ND	ND	ND
10'	[illegible]3	ND	24	11	3.4	ND

WMU20-B/HB1	TCE	PCE
1-2'	ND	10000
2.2'	2800	ND
5-6'	ND	208

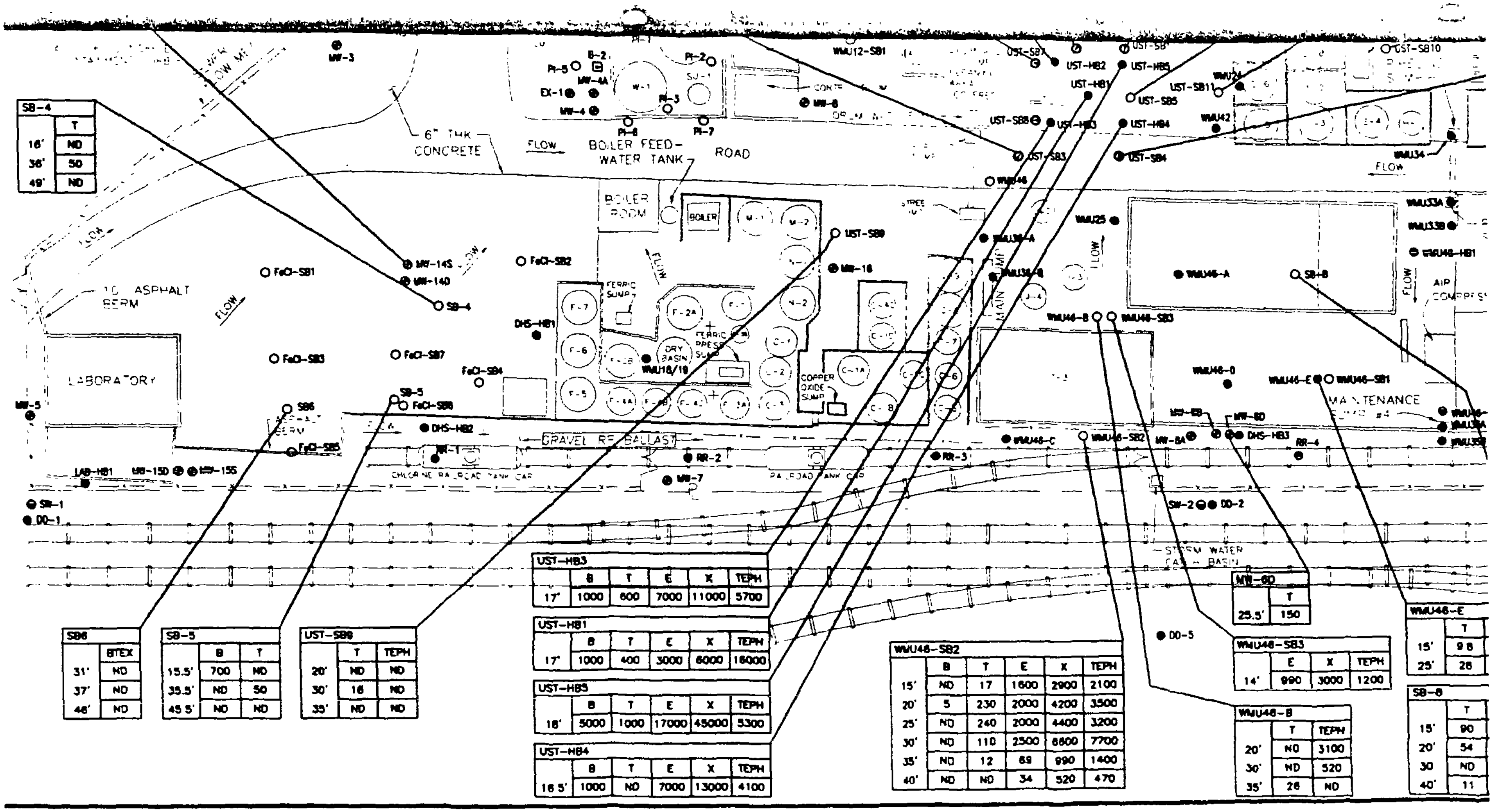
WMU20-A/HB2	PCE
1-2'	6.4
5-6'	ND

MW-120	TCE	PCE
4'	110	10

SB-2	MC	Acetone	2-Butanone
1.5'	31	ND	ND
5.5'	13	ND	ND
10.5'	120	20	10



N
1" = 30'
15
0
30
TCE
PCE
110
10
SB-2
MC
Acetone
1.5'
31
ND
ND
5.5'
13
ND
ND
10.5'
120
20
10
STORAGE
SB-2
SB-1
EQUIPMENT STORAGE
AUXILIARY OFFICE TRAILER
MW-1
MW-10/BG-1
LEGEND
DEEP SOIL BORING
DEEP SLANT SOIL BORING (ARROW INDICATES DIRECT
SURFACE AND SHALLOW SOIL BORING
MONITORING WELL
SURFACE WATER SAMPLE
PCE Tetrachlorothene
TCE Trichloroethene
DCA Dichloroethane
DCE Dichloroethene



SB-4	T
16'	ND
36'	50
49'	ND

SB6	BTEX
31'	ND
37'	ND
46'	ND

SB-5	B	T
15.5'	700	ND
35.5'	ND	50
45.5'	ND	ND

UST-SB9	T	TEPH
20'	ND	ND
30'	16	ND
35'	ND	ND

UST-HB3	B	T	E	X	TEPH
17'	1000	600	7000	11000	5700

UST-HB1	B	T	E	X	TEPH
17'	1000	400	3000	6000	16000

UST-HB5	B	T	E	X	TEPH
18'	5000	1000	17000	45000	5300

UST-HB4	B	T	E	X	TEPH
16.5'	1000	ND	7000	13000	4100

WMU46-SB2	B	T	E	X	TEPH
15'	ND	17	1600	2900	2100
20'	5	230	2000	4200	3500
25'	ND	240	2000	4400	3200
30'	ND	110	2500	6600	7700
35'	ND	12	69	990	1400
40'	ND	ND	34	520	470

MW-6D	T
25.5'	150

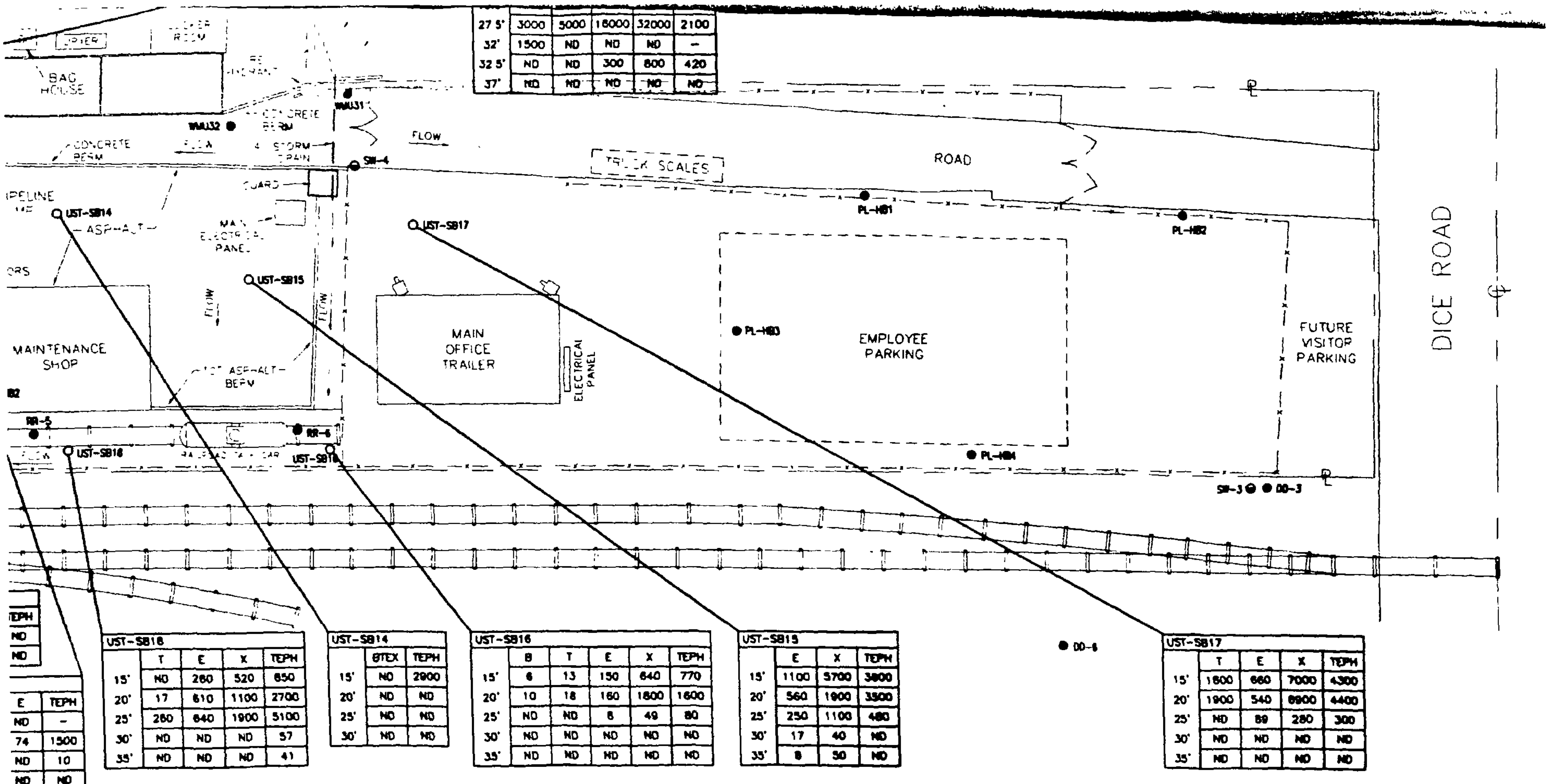
WMU46-SB3	E	X	TEPH
14'	990	3000	1200

WMU46-B	T	TEPH
20'	ND	3100
30'	ND	520
35'	26	ND

WMU46-E	T
15'	98
25'	28

SB-8	T
15'	90
20'	54
30	ND
40'	11

CDM



27 5'	3000	5000	16000	32000	2100
32'	1500	ND	ND	ND	–
32 5'	ND	ND	300	800	420
37'	ND	ND	ND	ND	ND

TEPH
ND
ND

E	TEPH
ND	–
74	1500
ND	10
ND	ND

UST-SB18

	T	E	X	TEPH
15'	ND	260	520	650
20'	17	610	1100	2700
25'	260	640	1900	5100
30'	ND	ND	ND	57
35'	ND	ND	ND	41

UST-SB14

	BTEX	TEPH
15'	ND	2900
20'	ND	ND
25'	ND	ND
30'	ND	ND

UST-SB16

	B	T	E	X	TEPH
15'	6	13	150	640	770
20'	10	18	160	1800	1600
25'	ND	ND	6	49	80
30'	ND	ND	ND	ND	ND
35'	ND	ND	ND	ND	ND

UST-SB15

	E	X	TEPH
15'	1100	5700	3800
20'	560	1900	3500
25'	250	1100	480
30'	17	40	ND
35'	8	50	ND

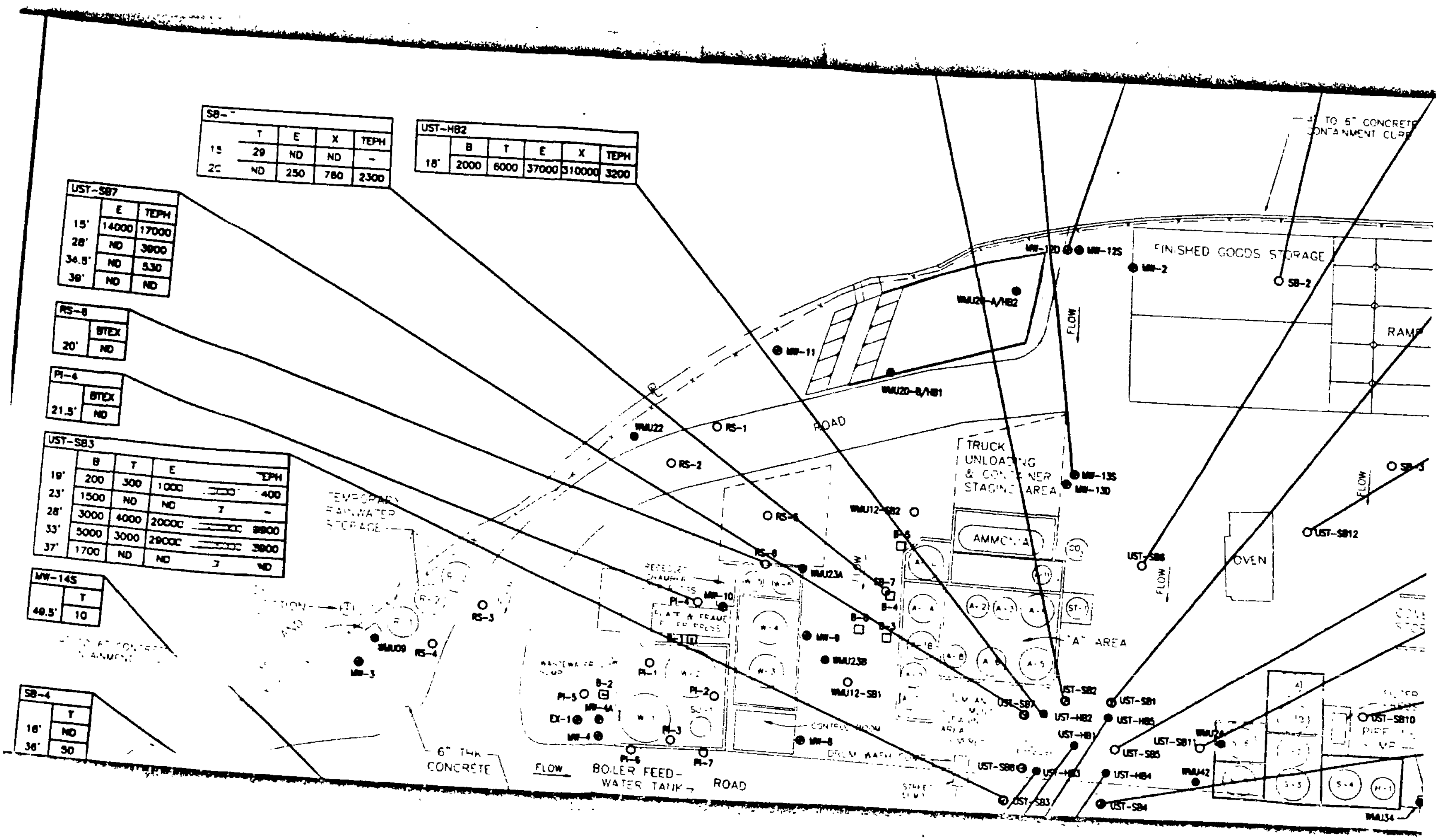
UST-SB17

	T	E	X	TEPH
15'	1600	660	7000	4300
20'	1900	540	6900	4400
25'	ND	89	280	300
30'	ND	ND	ND	ND
35'	ND	ND	ND	ND

PHIBRO-TECH, INC.
8851 DICE ROAD, SANTA FE SPRINGS, CALIFORNI

Deep Soil
Aromatic VOCs and TEPH Results
(14 to 50 Feet bgs)

Plat



SB-?

	T	E	X	TEPH
15	29	ND	ND	–
20	ND	250	780	2300

UST-HB2

	B	T	E	X	TEPH
18'	2000	6000	37000	310000	3200

UST-SB7

	E	TEPH
15'	14000	17000
28'	ND	3900
34.5'	ND	530
39'	ND	ND

RS-8

	BTEX
20'	ND

PI-4

	BTEX
21.5'	ND

UST-SB3

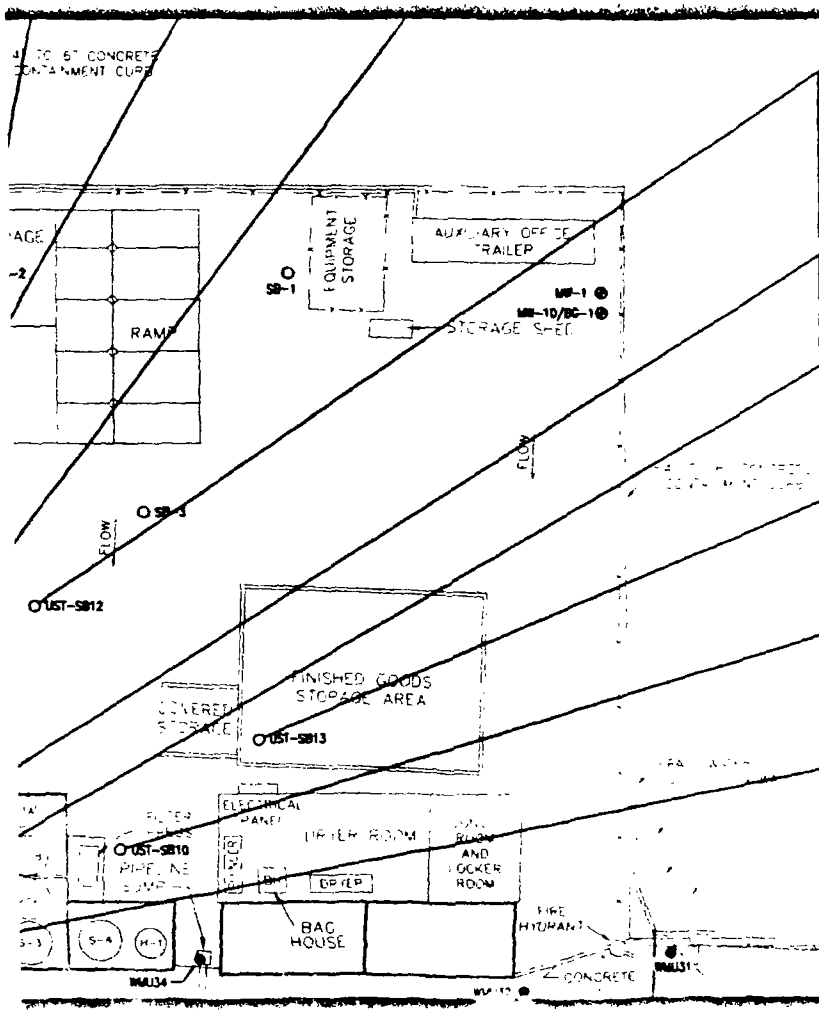
	B	T	E		TEPH
19'	200	300	1000	[illegible]	400
23'	1500	ND	ND	[illegible]	–
28'	3000	4000	20000	[illegible]	9900
33'	5000	3000	29000	[illegible]	3900
37'	1700	ND	ND	[illegible]	ND

MW-14S

	T
49.5'	10

SB-4

	T
18'	ND
36'	50



UST-SB12

	T	BTEX
15'	ND	ND
20'	ND	ND
25'	ND	ND
30'	ND	ND
35'	ND	ND

UST-SB5

	T	E	X	TEPH
20'	200	ND	2000	3900
30 5'	ND	600	ND	18

UST-SB11

	T	E	X	TEPH
20'	120	1000	1200	1900
30'	18	ND	ND	110
35'	19	ND	ND	ND

UST-SB13

	BTEX	TEPH
15'	ND	ND
20'	ND	ND
25'	ND	ND

UST-SB10

	T	TEPH
20'	ND	1500
30'	9.8	ND
35'	14	ND

UST-SB4

	B	T	E	X	TEPH
18.5'	1600	ND	ND	ND	–
18.5'	1000	1000	12000	28000	1800
27 5'	3000	5000	16000	32000	2100
32'	1500	ND	ND	ND	–
32 5'	ND	ND	300	800	420
37'	ND	ND	ND	ND	ND

LEGEND

- O DEEP SOIL BORING
- DEEP SLANT SOIL BORING (ARROW INDICATES DIRECTION)
- SURFACE AND SHALLOW SOIL BORING
- MONITORING WELL
- SURFACE WATER SAMPLE

B	Benzene (µg/kg)
T	Toluene (µg/kg)
E	Ethylbenzene (µg/kg)
X	Total Xylenes (µg/kg)
TEPH	Total Extractable Petroleum Hydrocarbons (mg/kg)
–	Not Analyzed
ND	Not Detected
bgs	Below ground surface

Note:
For BTEX compounds, compound was not detected if not shown.

B-7				
	T	E	X	TEPH
15'	29	ND	ND	-
20'	ND	[illegible]	[illegible]	[illegible]

UST-HB2					
	B	T	E	X	TEPH
18'	2000	6000	37000	310000	3200

UST-SB2				
	B	E	X	TEPH
15'	1900	ND	ND	ND
18'	ND	13000	21000	1900
27'	300	~	2000	3500
31.5'	ND	ND	ND	24
36'	ND	ND	ND	9

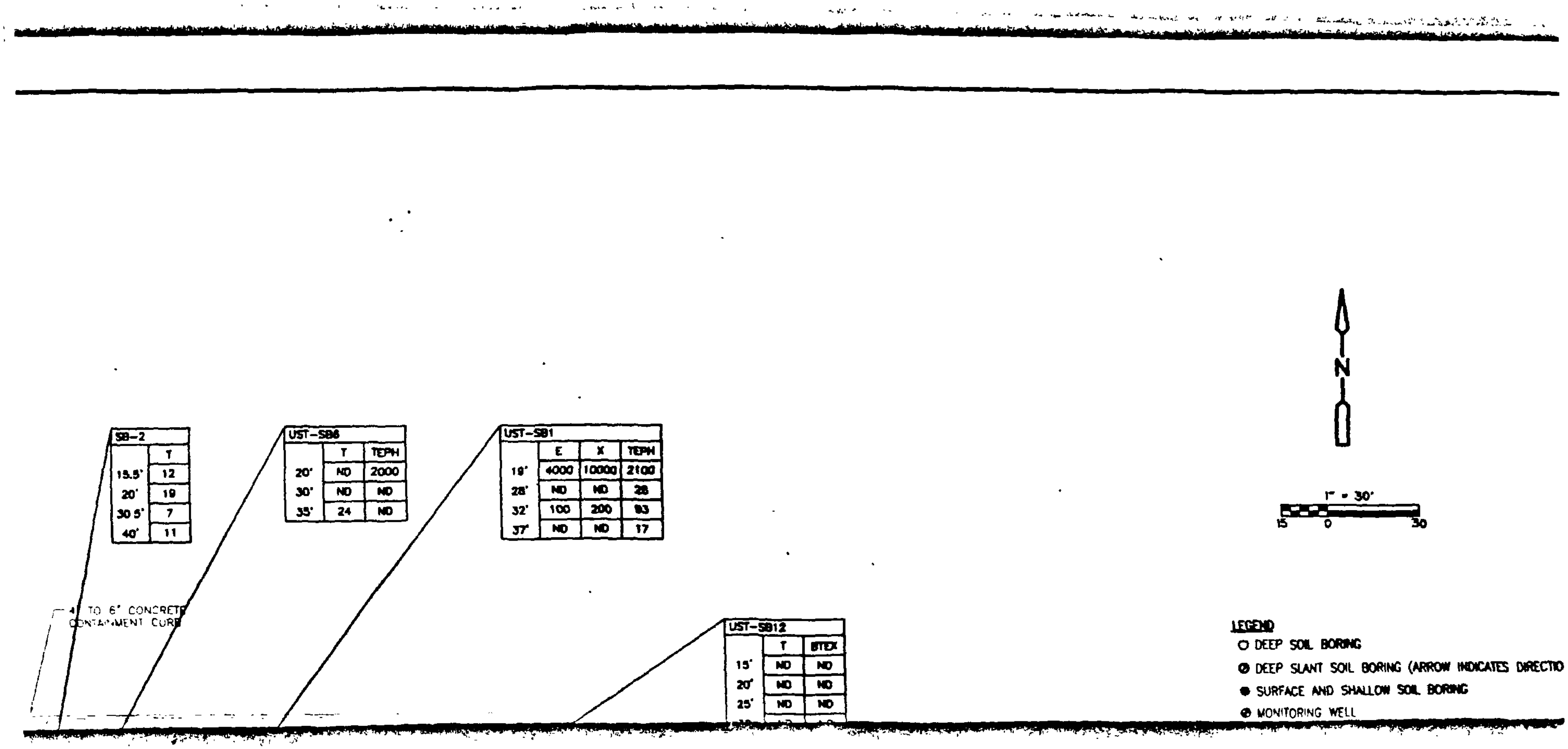
MW-13S	
	BTEX
20'	ND

MW-12D	
	BTEX
45'	ND

4" TO 6" CONCRETE CONTAINMENT CURB

SB-2	
	T
15.5'	12
20'	19
30.5'	7
40'	11

UST-SB6		
	T	TEPH
20'	ND	2000
30'	ND	ND
35'	24	ND



SB-2	T
15.5'	12
20'	19
30 5'	7
40'	11

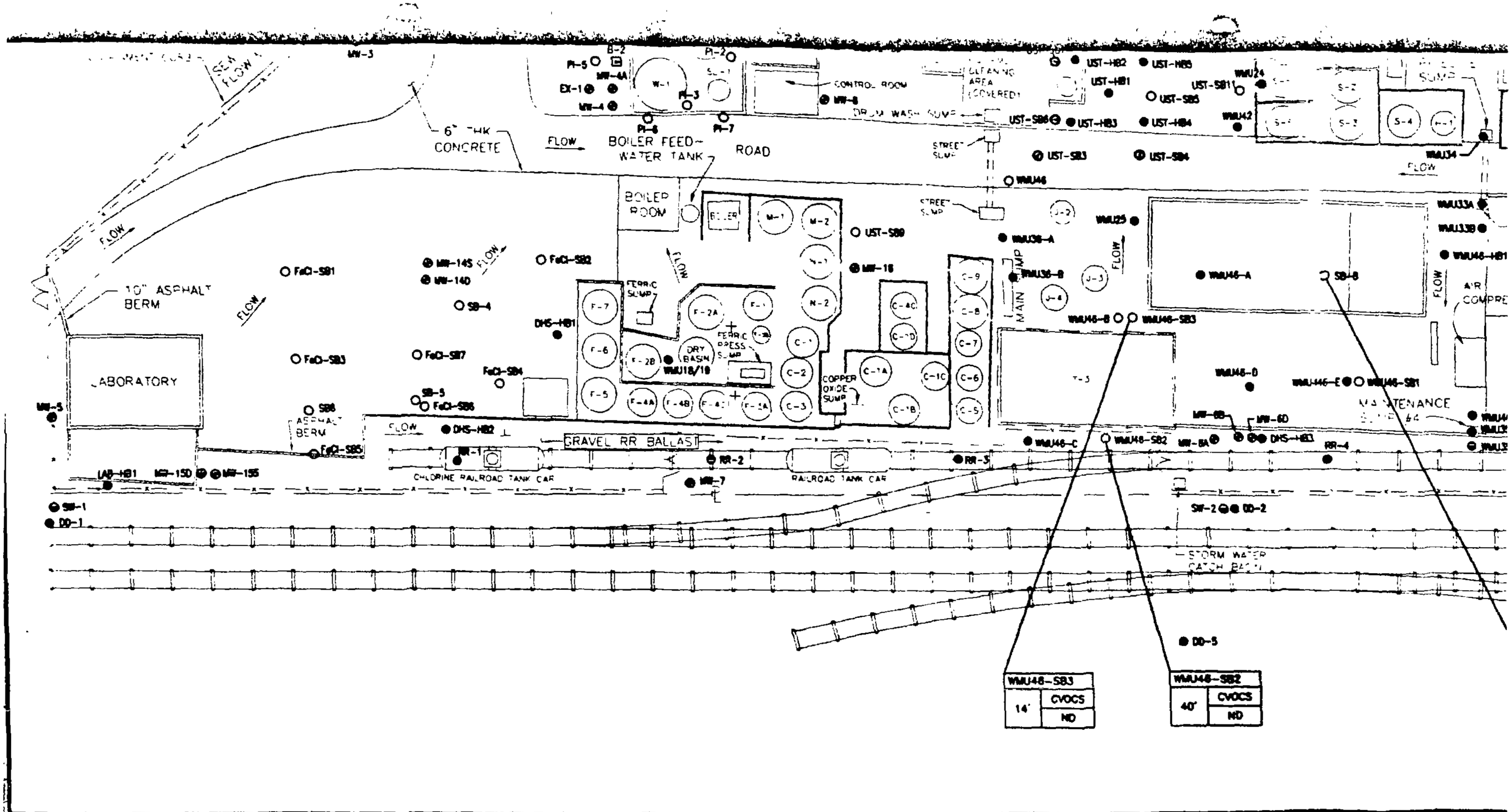
UST-SB6	T	TEPH
20'	ND	2000
30'	ND	ND
35'	24	ND

UST-SB1	E	X	TEPH
19'	4000	10000	2100
28'	ND	ND	28
32'	100	200	93
37'	ND	ND	17

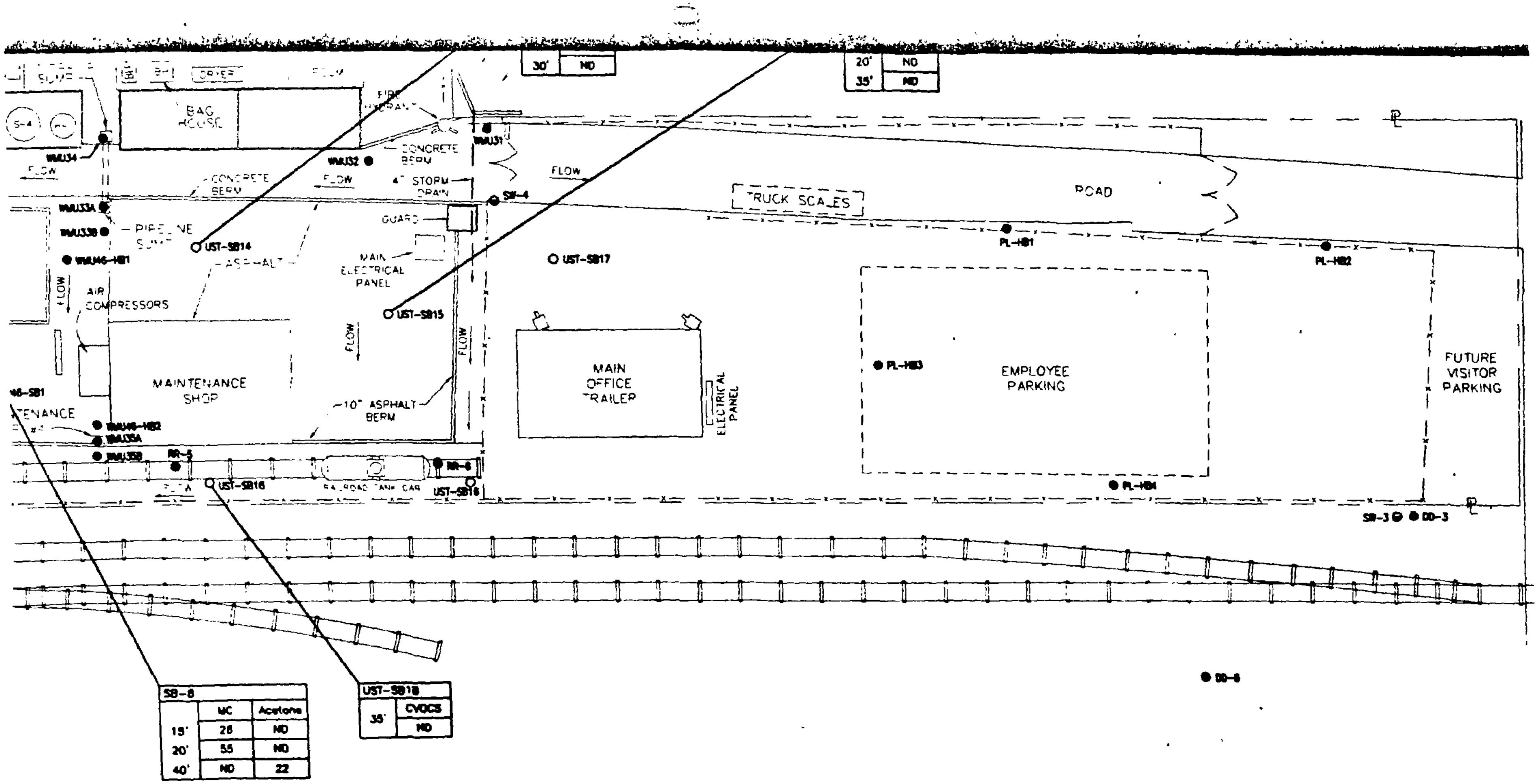
UST-SB12	T	BTEX
15'	ND	ND
20'	ND	ND
25'	ND	ND

LEGEND

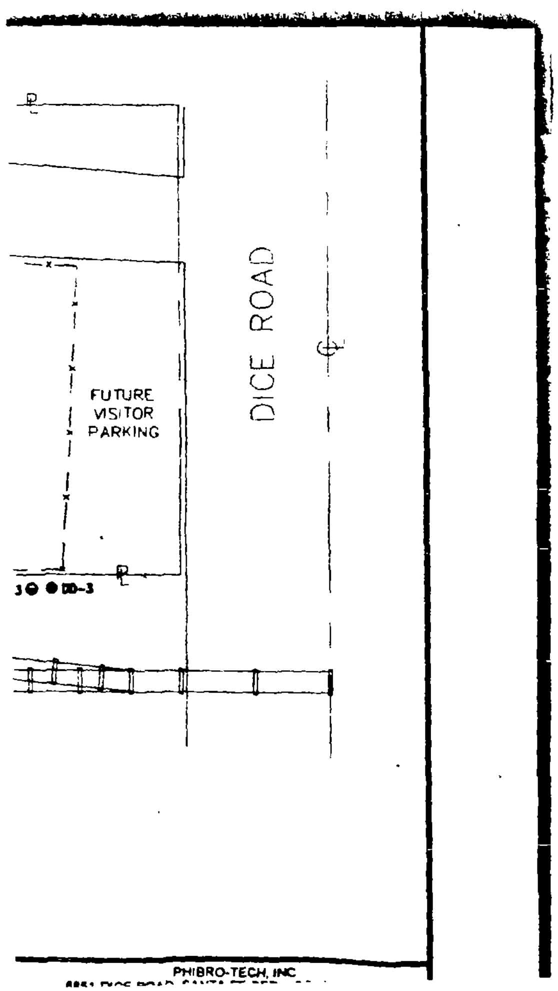
- DEEP SOIL BORING
- DEEP SLANT SOIL BORING (ARROW INDICATES DIRECTIO
- SURFACE AND SHALLOW SOIL BORING
- MONITORING WELL

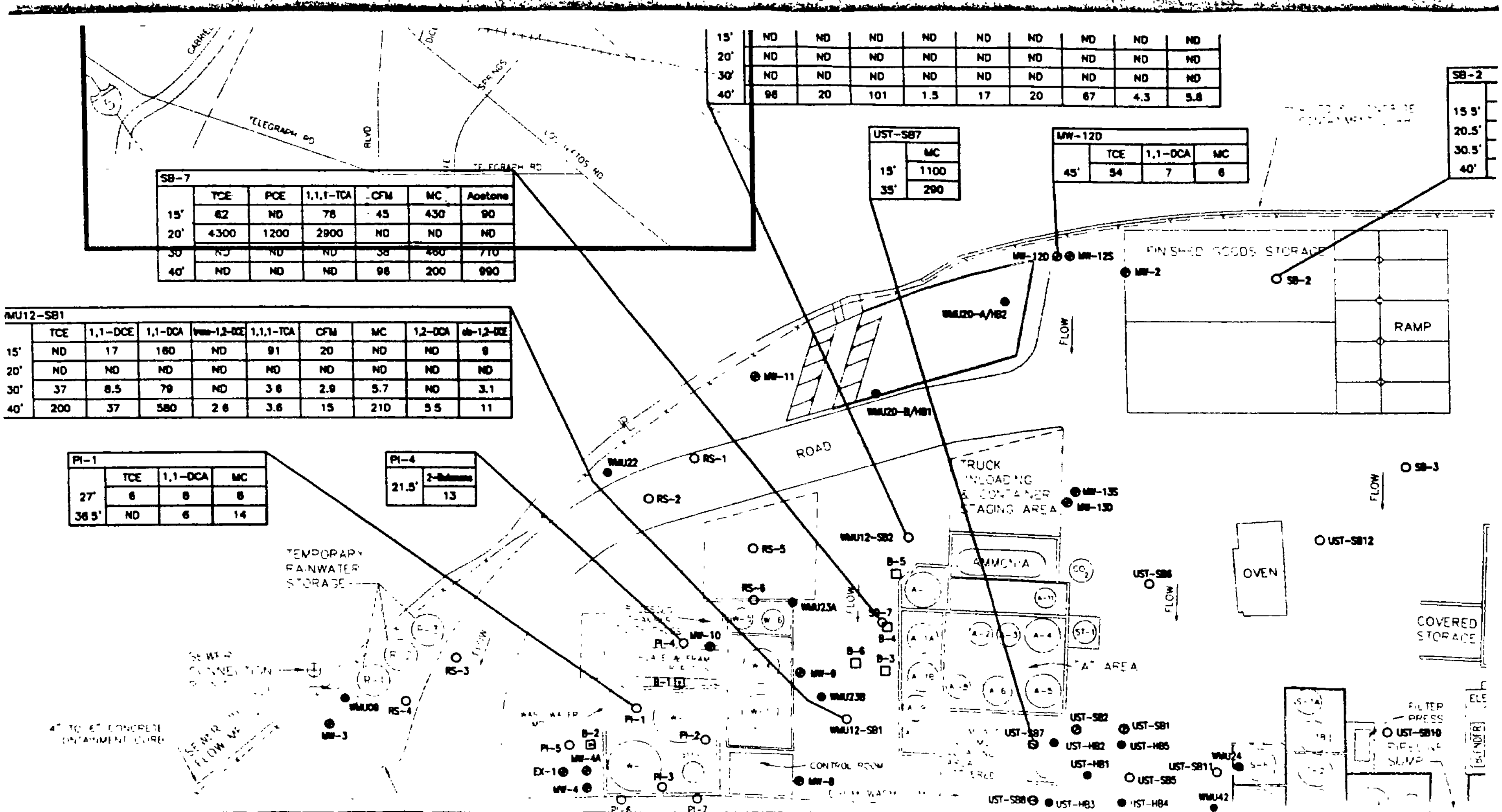


6" THK CONCRETE
FLOW
BOILER FEED-WATER TANK
ROAD
CONTROL ROOM
DRUM WASH SUMP
STREET SUMP
BOILER ROOM
10" ASPHALT BERM
LABORATORY
FERRIC SUMP
FERRIC PRESS SUMP
DRY BASIN
COPPER OXIDE SUMP
MAIN SUMP
ASPHALT BERM
GRAVEL RR BALLAST
CHLORINE RAILROAD TANK CAR
RAILROAD TANK CAR
MAINTENANCE SUMP #4
STORM WATER CATCH BASIN
AIR COMPRE
FeCl-SB1
FeCl-SB2
FeCl-SB3
FeCl-SB4
FeCl-SB5
FeCl-SB6
FeCl-SB7
SB-4
SB-5
SB6
SB-8
MW-14S
MW-140
MW-15
MW-16
MW-7
MW-150
MW-155
MW-3
MW-4
MW-4A
MW-5
MW-6B
MW-6D
MW-8A
MW-8
DHS-HB1
DHS-HB2
DHS-HB3
WMU18/19
WMU24
WMU25
WMU34
WMU33A
WMU33B
WMU36-A
WMU36-B
WMU42
WMU46
WMU46-A
WMU46-B
WMU46-C
WMU46-D
WMU46-E
WMU46-HB1
WMU46-SB1
WMU46-SB2
WMU46-SB3
UST-HB1
UST-HB2
UST-HB3
UST-HB4
UST-HB5
UST-SB1
UST-SB3
UST-SB4
UST-SB5
UST-SB6
UST-SB9
PI-2
PI-3
PI-5
PI-6
PI-7
B-2
EX-1
RR-1
RR-2
RR-3
RR-4
SW-1
SW-2
DD-1
DD-2
DD-5
LAB-HB1
WMU46-SB3
14'
CVOCS
ND
WMU46-SB2
40'
CVOCS
ND



PHI
8851 DICE ROAD, SA
Deep S
VC


DICE ROAD
FUTURE
VISITOR
PARKING
DD-3
PHIBRO-TECH, INC



15'	ND	ND	ND	ND	ND	ND	ND	ND	ND
20'	ND	ND	ND	ND	ND	ND	ND	ND	ND
30'	ND	ND	ND	ND	ND	ND	ND	ND	ND
40'	98	20	101	1.5	17	20	67	4.3	5.8

UST-SB7

	MC
15'	1100
35'	290

MW-12D

	TCE	1,1-DCA	MC
45'	54	7	6

SB-2

15.5'	
20.5'	
30.5'	
40'	

SB-7

	TCE	PCE	1,1,1-TCA	CFM	MC	Acetone
15'	62	ND	78	45	430	90
20'	4300	1200	2900	ND	ND	ND
30'	ND	ND	ND	38	460	710
40'	ND	ND	ND	98	200	990

WMU12-SB1

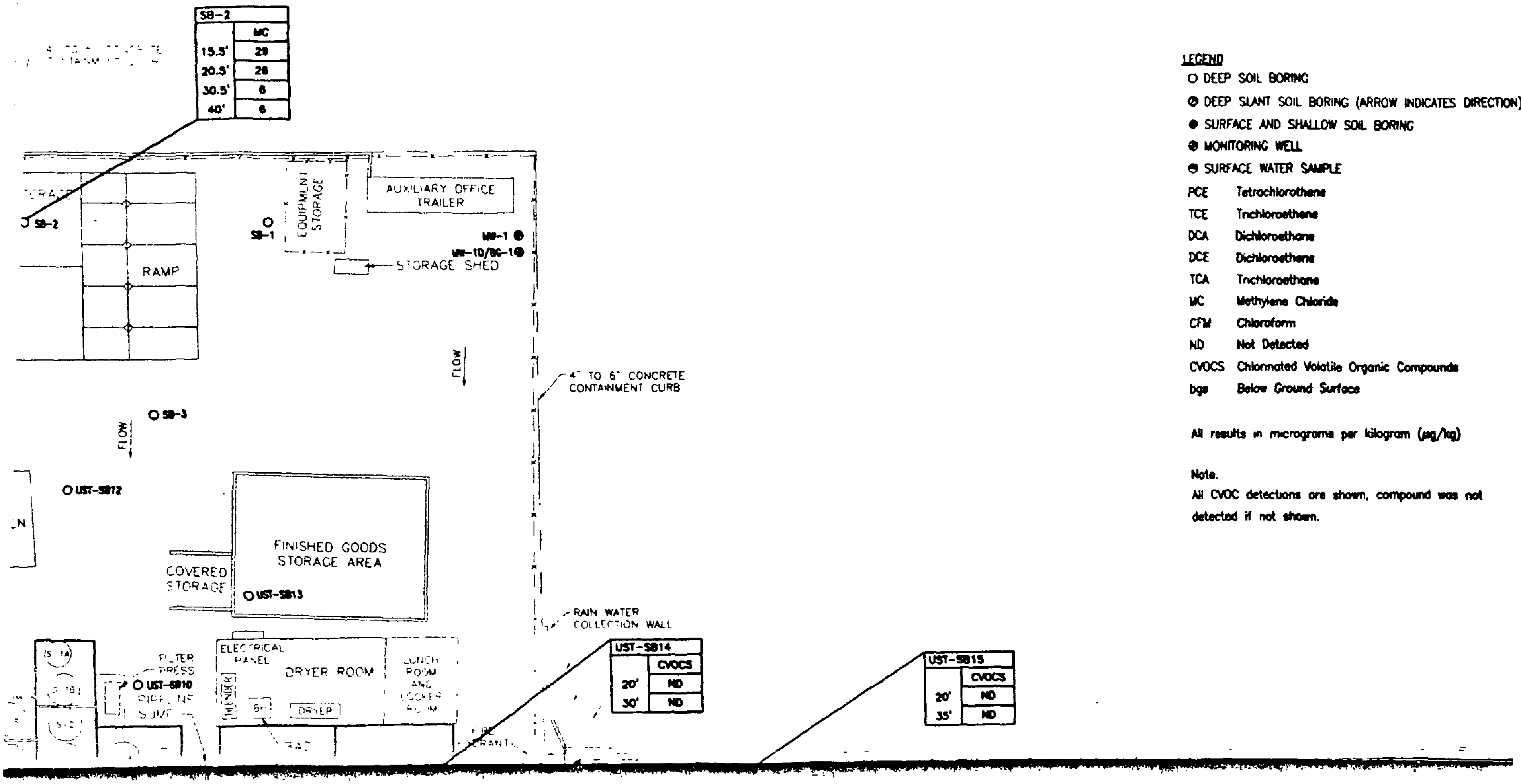
	TCE	1,1-DCE	1,1-DCA	trans-1,2-DCE	1,1,1-TCA	CFM	MC	1,2-DCA	cis-1,2-DCE
15'	ND	17	160	ND	91	20	ND	ND	9
20'	ND	ND	ND	ND	ND	ND	ND	ND	ND
30'	37	6.5	79	ND	3 6	2.9	5.7	ND	3.1
40'	200	37	580	2 6	3.6	15	210	5 5	11

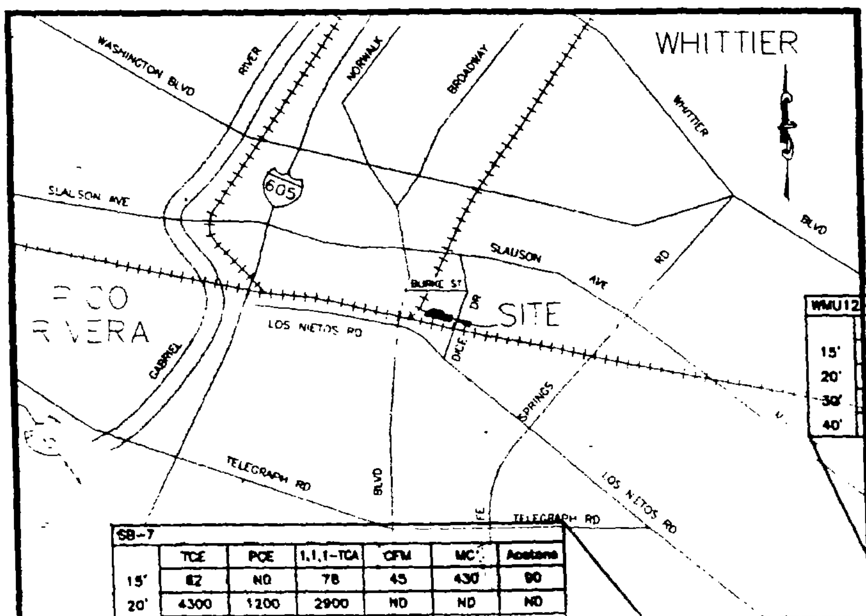
PI-1

	TCE	1,1-DCA	MC
27'	6	6	6
36.5'	ND	6	14

PI-4

	2-Butanone
21.5'	13


SB-2
MC
15.5' 29
20.5' 26
30.5' 6
40' 6
SB-2
RAMP
SB-1
EQUIPMENT STORAGE
AUXILIARY OFFICE TRAILER
MW-1
MW-1D/DC-1
STORAGE SHED
FLOW
4" TO 6" CONCRETE CONTAINMENT CURB
SB-3
FLOW
UST-SB12
FINISHED GOODS STORAGE AREA
COVERED STORAGE
UST-SB13
RAIN WATER COLLECTION WALL
FILTER PRESS
UST-SB10
PIPELINE SUMP
ELECTRICAL PANEL
DRYER ROOM
DRYER
LUNCH ROOM AND LOCKER ROOM
UST-SB14
CVOCS
20' ND
30' ND
UST-SB15
CVOCS
20' ND
35' ND
LEGEND
DEEP SOIL BORING
DEEP SLANT SOIL BORING (ARROW INDICATES DIRECTION)
SURFACE AND SHALLOW SOIL BORING
MONITORING WELL
SURFACE WATER SAMPLE
PCE Tetrachlorothene
TCE Trichloroethene
DCA Dichloroethane
DCE Dichloroethene
TCA Trichloroethane
MC Methylene Chloride
CFM Chloroform
ND Not Detected
CVOCS Chlorinated Volatile Organic Compounds
bgs Below Ground Surface
All results in micrograms per kilogram (µg/kg)
Note.
All CVOC detections are shown, compound was not detected if not shown.



SB-7	TCE	PCE	1,1,1-TCA	CFM	MC	Acetone
15'	62	ND	78	45	430	90
20'	4300	1200	2900	ND	ND	ND

WMU12-SB2	TCE	1,1-DCE	1,1-DCA	trans-1,2-DCE	1,1,1-TCA	CFM	[illegible]	[illegible]-DCA	cis-1,2-DCE
15'	ND	ND	ND	ND	ND	ND	[illegible]	ND	ND
20'	ND	ND	ND	ND	ND	ND	[illegible]	ND	ND
30'	ND	ND	ND	ND	ND	ND	[illegible]	ND	ND
40'	98	20	101	1.5	17	[illegible]	[illegible]	4.3	5.8

UST-SB7	MC
15'	1100
35'	290

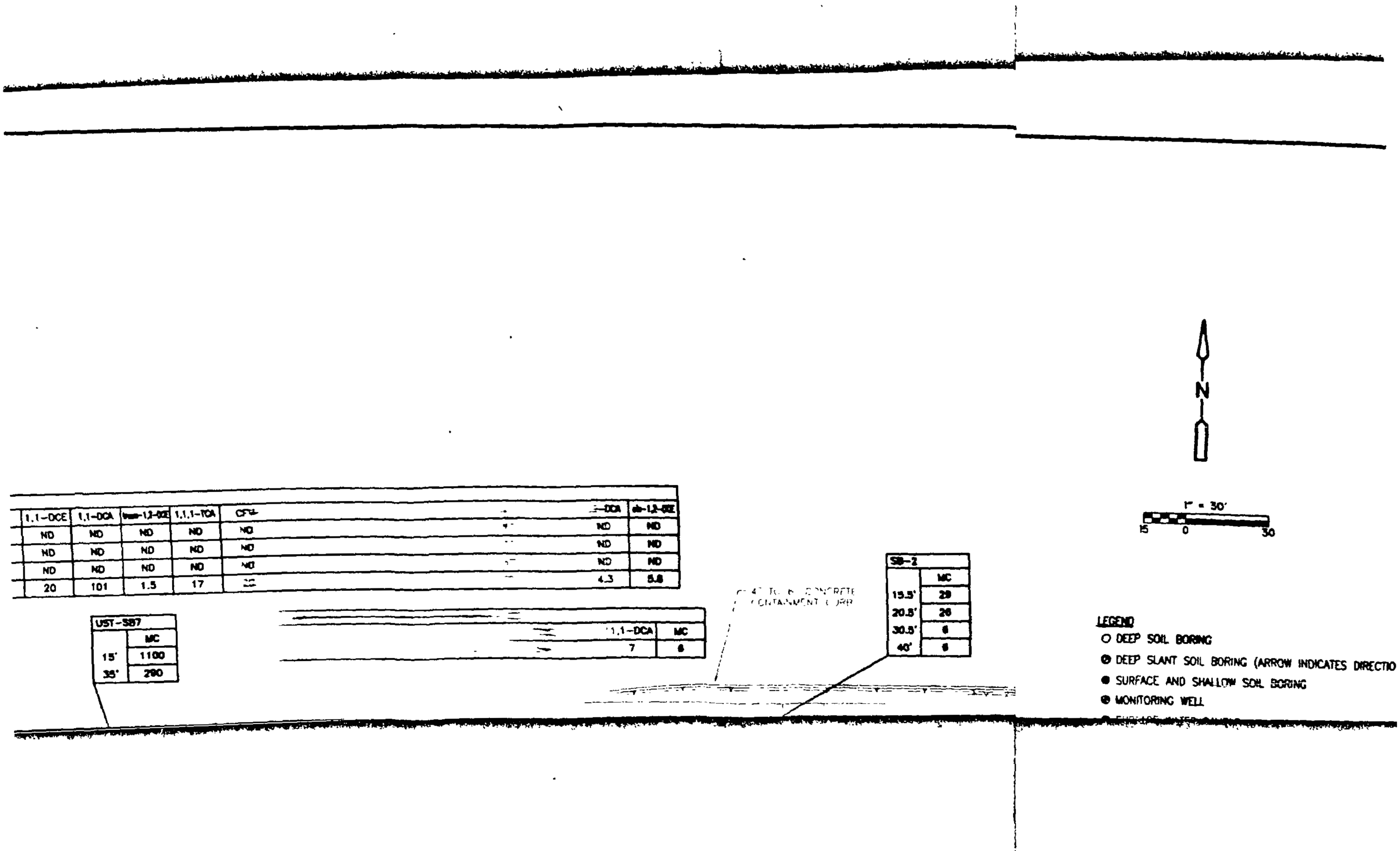
[illegible]	1,1-DCA	MC
[illegible]	7	6

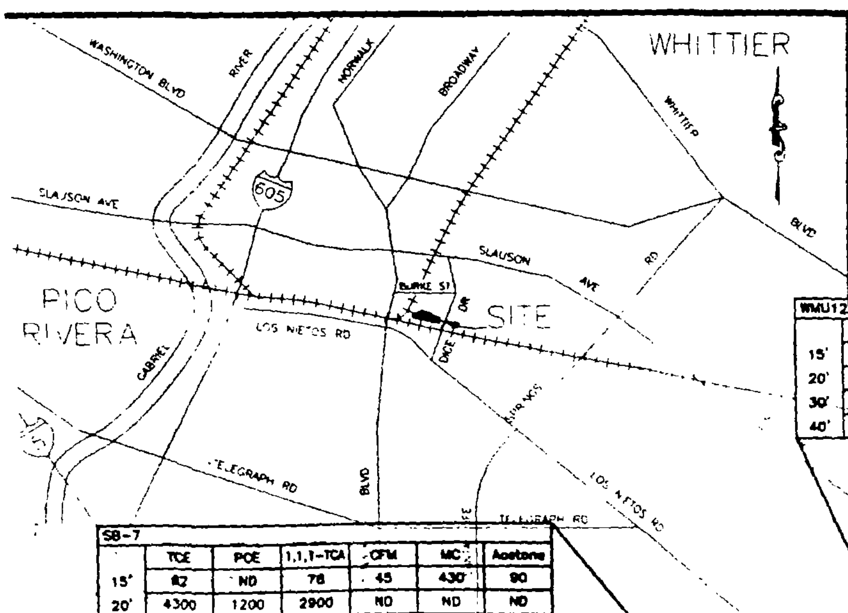
1,1-DCE	1,1-DCA	trans-1,2-DCE	1,1,1-TCA	CFM	[illegible]	-DCA	cis-1,2-DCE
ND	ND	ND	ND	ND	[illegible]	ND	ND
ND	ND	ND	ND	ND	[illegible]	ND	ND
ND	ND	ND	ND	ND	[illegible]	ND	ND
20	101	1.5	17	[illegible]	[illegible]	4.3	5.8

UST-SB7	
	MC
15'	1100
35'	290

1,1-DCA	MC
7	6

SB-2	
	MC
15.5'	29
20.5'	26
30.5'	6
40'	6





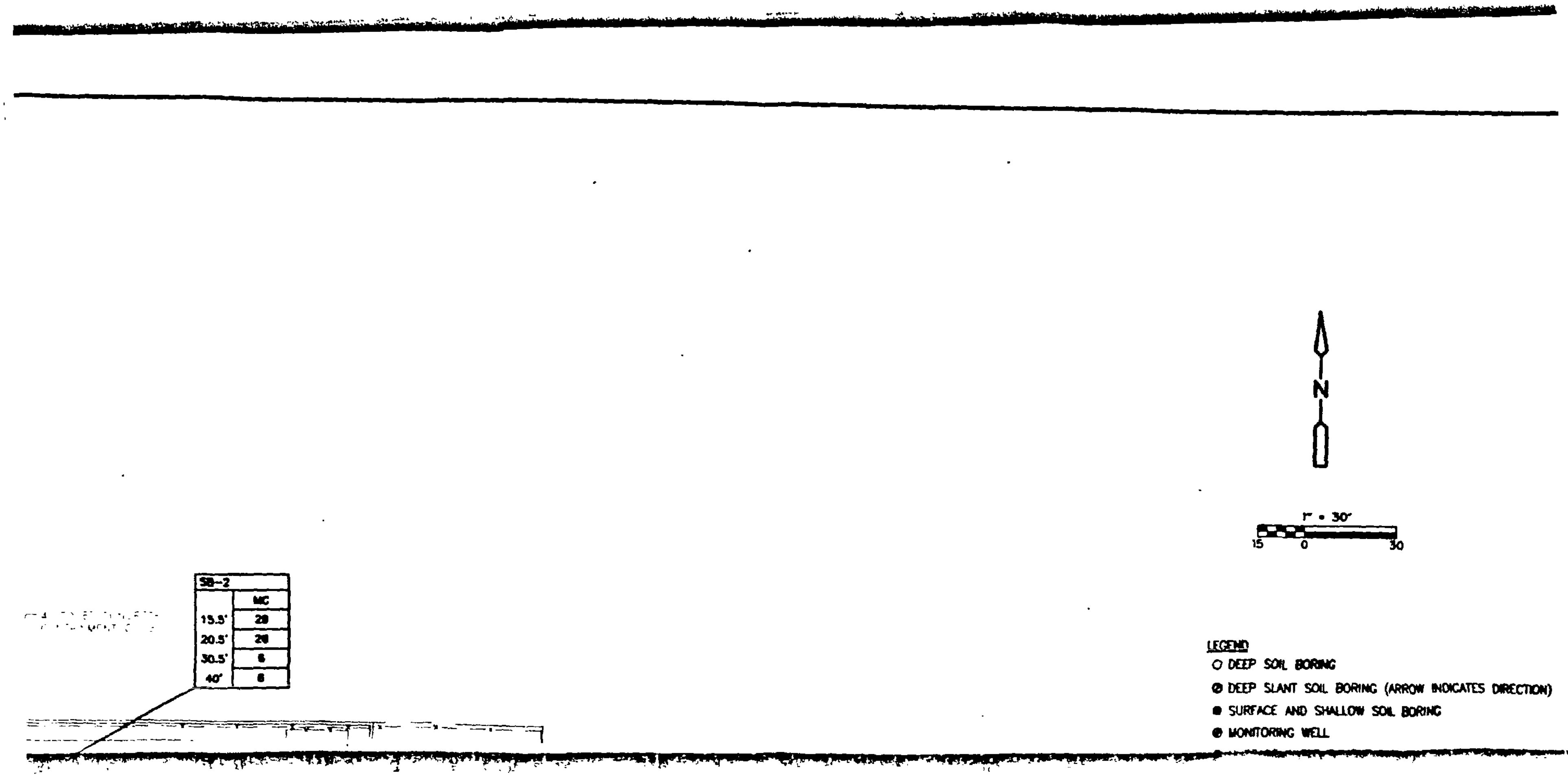
WMU12-SB2	TCE	1,1-DCE	1,1-DCA	trans-1,2-DCE	1,1,1-TCA	CFM	MC	1,2-DCA	cis-1,2-DCE
15'	ND	ND	ND	ND	ND	ND	ND	ND	ND
20'	ND	ND	ND	ND	ND	ND	ND	ND	ND
30'	ND	ND	ND	ND	ND	ND	ND	ND	ND
40'	96	20	101	1.5	17	20	67	4.3	5.8

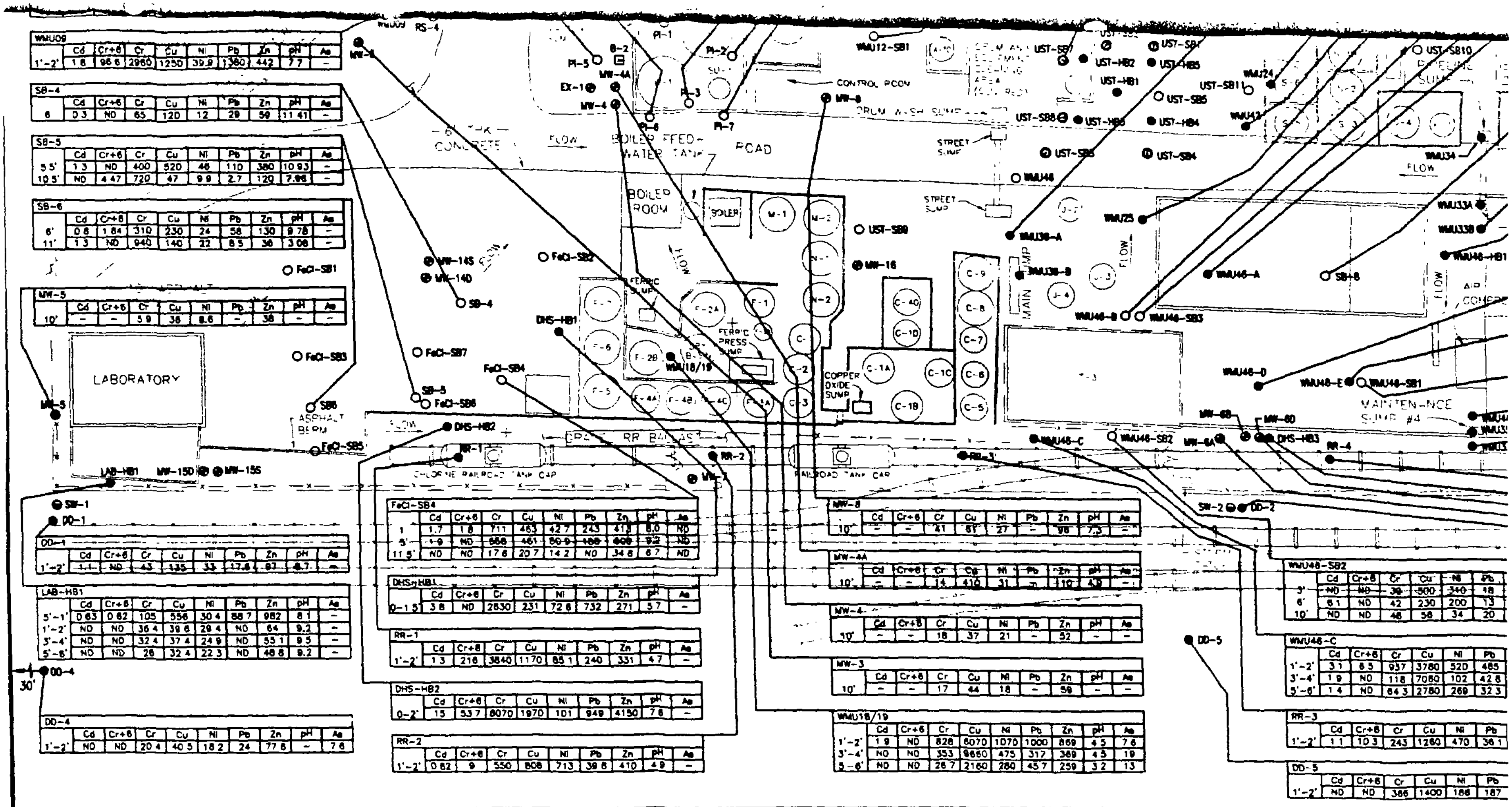
UST-SB7	MC
15'	1100
35'	290

MW-12D	TCE	1,1-DCA	MC
45'	54	7	6

SB-2	MC
15.5'	29
20.5'	26
30.5'	6
40'	6

SB-7	TCE	PCE	1,1,1-TCA	CFM	MC	Acetone
15'	82	ND	78	45	430	90
20'	4300	1200	2900	ND	ND	ND


SB-2
MC
15.5' 28
20.5' 28
30.5' 6
40' 6
N
1" = 30'
15 0 30
LEGEND
DEEP SOIL BORING
DEEP SLANT SOIL BORING (ARROW INDICATES DIRECTION)
SURFACE AND SHALLOW SOIL BORING
MONITORING WELL



WMU09

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	1 8	96 6	2960	1250	39.9	1380	442	7 7	–

SB-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
6	0 3	ND	65	120	12	29	59	11 41	–

SB-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
5 5'	1 3	ND	400	520	46	110	380	10 93	–
10 5'	ND	4 47	720	47	9 9	2.7	120	7.86	–

SB-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
6'	0 8	1 84	310	230	24	58	130	9 78	–
11'	1 3	ND	940	140	22	8 5	36	3 06	–

MW-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	5 9	36	8.6	–	38	–	–

DD-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	~~1.1~~	~~ND~~	~~43~~	~~135~~	~~33~~	~~17.6~~	~~87~~	~~8.7~~	~~–~~

LAB-HB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
5'-1'	0 63	0 62	105	556	30 4	88 7	982	8 1	–
1'-2'	ND	ND	36 4	39 6	29 4	ND	64	9.2	–
3'-4'	ND	ND	32 4	37 4	24 9	ND	55 1	9 5	–
5'-6'	ND	ND	26	32 4	22 3	ND	48 6	9.2	–

DD-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	ND	ND	20 4	40 5	18 2	24	77 6	–	7 6

FeCl-SB4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1	1.7	1 8	711	463	42 7	243	413	6.0	ND
5'	~~1 9~~	~~ND~~	~~668~~	~~461~~	~~80 9~~	~~166~~	~~800~~	~~9.2~~	~~ND~~
11 5'	ND	ND	17 6	20 7	14 2	ND	34 6	6 7	ND

DHS-HB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
0-1 5'	3 6	ND	2630	231	72 6	732	271	5 7	–

RR-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	1 3	216	3840	1170	65 1	240	331	4 7	–

DHS-HB2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
0-2'	15	53 7	8070	1970	101	949	4150	7 6	–

RR-2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	0 82	9	550	808	713	39 6	410	4 9	–

MW-8

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	41	61	27	–	98	7.3	–

MW-4A

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	14	410	31	–	110	4.9	–

MW-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	18	37	21	–	52	–	–

MW-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	17	44	18	–	58	–	–

WMU18/19

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	1 9	ND	828	6070	1070	1000	869	4 5	7 6
3'-4'	ND	ND	353	9660	475	317	369	4 5	19
5-6'	ND	ND	26 7	2160	280	45 7	259	3 2	13

WMU46-SB2

	Cd	Cr+6	Cr	Cu	Ni	Pb
3'	~~ND~~	~~ND~~	~~39~~	~~500~~	~~340~~	48
6'	6 1	ND	42	230	200	13
10'	ND	ND	46	58	34	20

WMU46-C

	Cd	Cr+6	Cr	Cu	Ni	Pb
1'-2'	3 1	8 5	937	3780	520	485
3'-4'	1 9	ND	118	7060	102	42 6
5'-6'	1 4	ND	64 3	2780	269	32 3

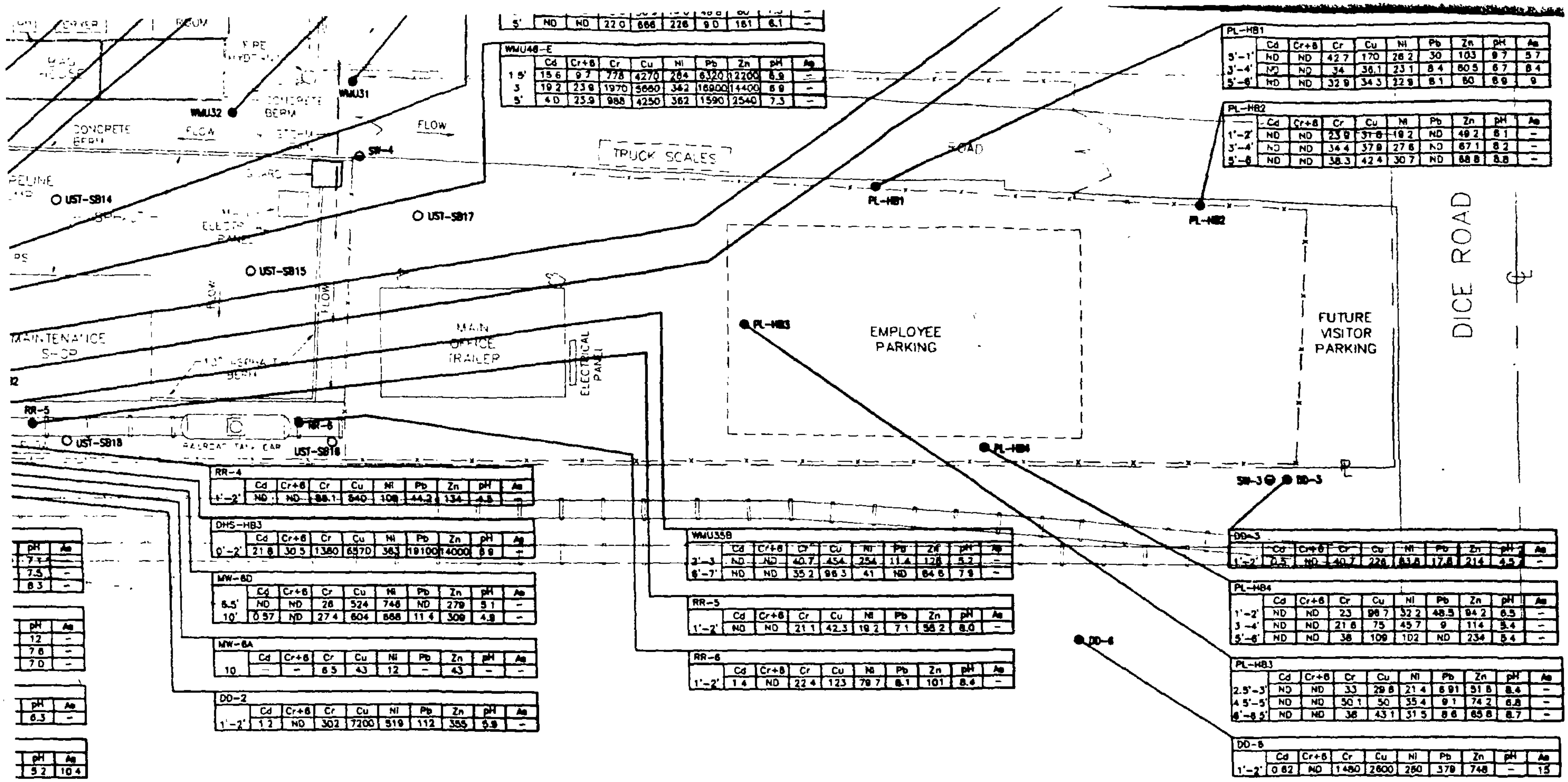
RR-3

	Cd	Cr+6	Cr	Cu	Ni	Pb
1'-2'	1 1	10 3	243	1260	470	36 1

DD-5

	Cd	Cr+6	Cr	Cu	Ni	Pb
1'-2'	ND	ND	366	1400	166	187

CDM



	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
5'	ND	ND	22 0	666	226	9 0	181	6.1	–

WMU46-E

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1 5'	15 6	9 7	778	4270	284	6320	12200	6.9	–
3	19 2	23 9	1970	5660	342	16900	14400	6 9	–
5'	4 0	23.9	988	4250	362	1590	2540	7.3	–

PL-HB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
5'-1'	ND	ND	42 7	170	26 2	30	103	9 7	5 7
3'-4'	ND	ND	34	36.1	23 1	8 4	80 5	6 7	8 4
5'-6'	ND	ND	32 9	34 3	22 9	8 1	80	8 9	9

PL-HB2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	ND	ND	23 9	31 6	19 2	ND	49 2	8 1	–
3'-4'	ND	ND	34 4	37 9	27 6	ND	67 1	8 2	–
5'-6'	ND	ND	38.3	42 4	30 7	ND	68 8	8.8	–

	pH	As
	7 7	–
	7.5	–
	8 3	–

	pH	As
	12	–
	7 6	–
	7 0	–

	pH	As
	6.3	–

	pH	As
	5 2	10 4

RR-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	ND	ND	88.1	840	109	44.2	134	4.8	–

DHS-HB3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
0'-2'	21 8	30 5	1380	6570	363	19100	14000	6 9	–

MW-6D

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
6.5'	ND	ND	26	524	746	ND	279	5 1	–
10'	0 57	ND	27 4	604	668	11 4	309	4.9	–

MW-6A

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10	–	–	6 5	43	12	–	43	–	–

DD-2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	1 2	ND	302	7200	519	112	355	5.9	–

WMU35B

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
2'-3	ND	ND	40.7	454	254	11.4	126	5.2	–
6'-7'	ND	ND	35 2	96 3	41	ND	84 6	7 9	–

RR-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	ND	ND	21 1	42.3	19 2	7 1	56 2	8.0	–

RR-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	1 4	ND	22 4	123	79 7	8.1	101	8.4	–

DD-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	0.5	ND	40.7	226	83.8	17.8	214	4.5	–

PL-HB4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	ND	ND	23	98 7	32 2	48.5	94 2	6.5	–
3 -4'	ND	ND	21 6	75	45 7	9	114	5.4	–
5'-6'	ND	ND	38	109	102	ND	234	5 4	–

PL-HB3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
2.5'-3'	ND	ND	33	29 8	21 4	6 91	51 6	8.4	–
4 5'-5'	ND	ND	50 1	50	35 4	9 1	74 2	6.8	–
8'-8 5'	ND	ND	38	43 1	31 5	8 6	65 8	8.7	–

DD-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	0 62	ND	1480	2600	260	379	748	–	15

PHIBRO-TECH INC
8851 DICE ROAD, SANTA FE SPRINGS, CALIFORNI

Shallow Soil
Metals and pH Results
(0 to 14 Feet bgs)

Plate

1	1 9	ND	250	345	63 2	143	93 7	3 0	–
3'	1 0	0 77	221	774	65 7	41	104	3 5	–
5	8 5	ND	38 2	208	363	118	2940	8 3	–
10'	ND	ND	33 5	118	59 1	11	225	4 8	–

MW-10

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	31	89	26	–	100	8 3	–

PI-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'	2	ND	552	323	309	1090	872	7 9	–
2	2 6	ND	28 4	82 5	41 7	1860	1170	8 2	–
6'	ND	ND	1870	17400	652	704	478	8 3	–
11'	ND	ND	37 5	53 6	30	8 8	63 7	7 2	–

B-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	53	470	–	–	–	8 0	–

PI-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
2 5	5 1	ND	37000	1180	39	61 3	128	10.0	72
3'	1 6	ND	2380	1120	41 4	6 4	108	9 9	21
7'	1 1	4 0	138	178	17 7	ND	39 9	8 6	5 3
12'	ND	94 5	894	91 3	28 8	ND	87 4	4 1	6.6

PI-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1	4 6	ND	1710	7090	340	885	2790	9 1	–
1 5'	1 7	ND	283	3950	217	416	1550	9 0	–
5'	ND	ND	23 9	201	48 5	ND	88 8	9 2	–
10'	5 1	ND	1140	2550	237	684	1890	9 3	–

PI-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1	1 4	ND	85 2	1580	134	1010	584	7 7	–
1 5'	2 0	21 4	82 7	980	45 9	2830	1070	8 7	–
5	ND	ND	34 2	314	24 0	28 6	210	4 5	–
10	ND	ND	33 0	39 4	28 3	10 6	57 6	8 2	–

RS-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'	14 2	ND	37 3	91 9	100	8850	3700	7 4	–
3'	181	ND	3140	19100	390	113000	23800	8 1	–
5	2 8	ND	4040	787	55 3	911	918	8 8	–
10'	ND	ND	22 8	29 9	22 1	12 9	82 1	7 8	–

RS-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1	7 2	4 6	63 5	152	21 2	3410	1230	7 9	–
3'	ND	138	28 1	278	28	70	533	8.6	–
5	0 8	ND	34 4	259	30 2	59 2	386	8.8	–
10	ND	8 2	18	26 4	18 3	7 7	49 5	7 8	–

WMU09

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1 – 2	1 8	98 8	2960	1250	39 9	1380	442	7 7	–

SB-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
6	0 3	ND	65	120	12	29	59	11 41	–

4 5	ND	ND	33 1	25 0	20 6	5 4	50 9	7 2	–
11	ND	14 4	2360	1040	25 1	34 4	92 5	9.2	–

PI-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
5'	ND	143	8940	908	12 9	641	24.7	9 3	–
1 5'	ND	ND	1570	604	39 6	63 5	115	9.5	–
5'	2 9	5 6	1380	1260	90 5	6 4	78 3	8.8	–
11 5'	ND	5 7	465	107	15 0	5 9	36 4	8.6	–

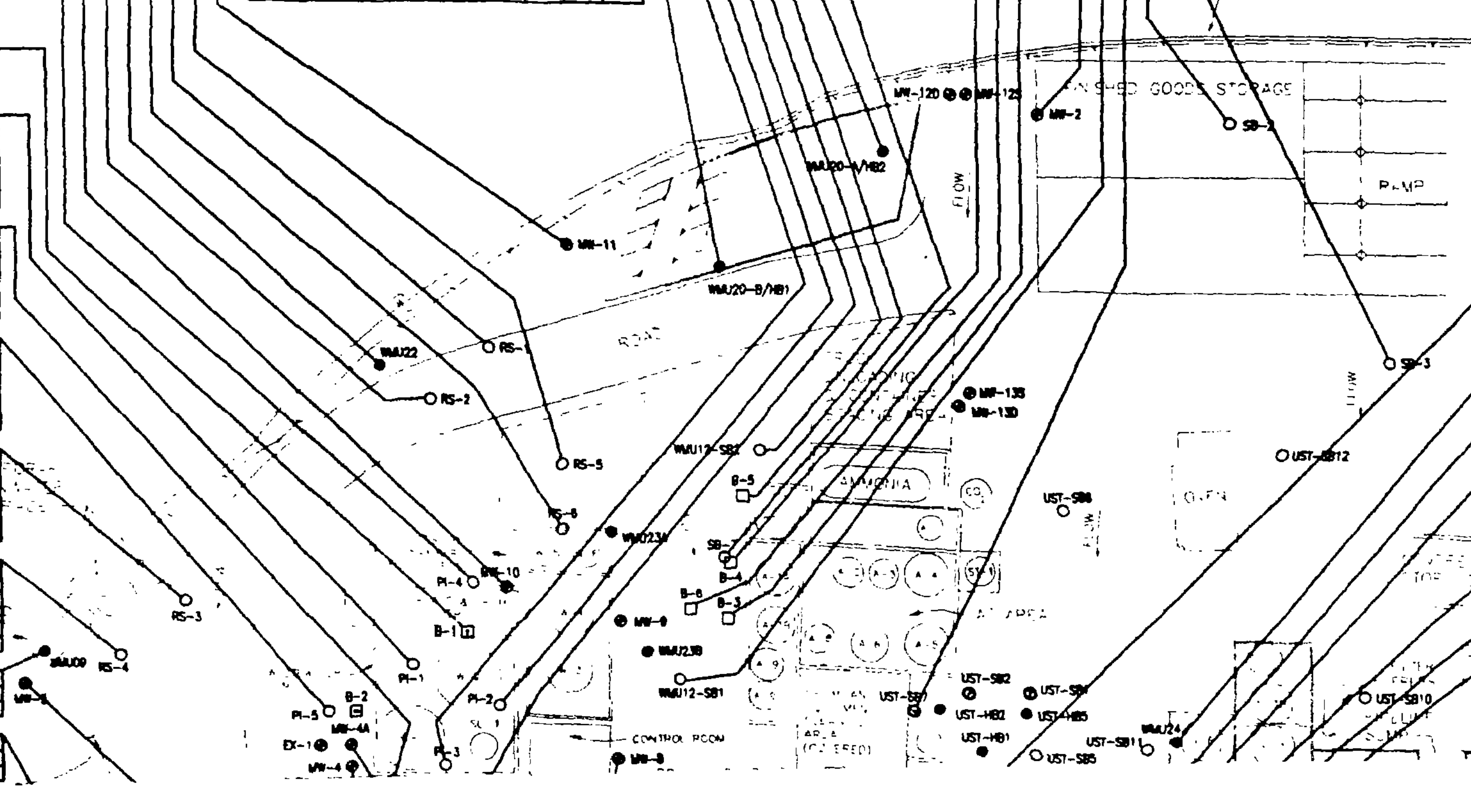
WMU20-B/HB1

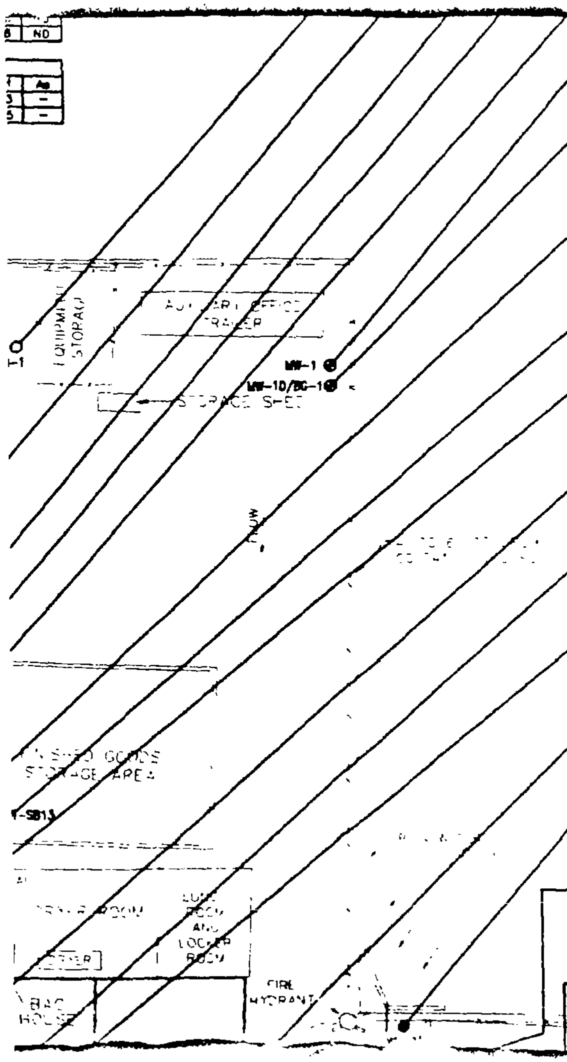
	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	4 4	1 4	244	428	218	541	287	7 4	–

10'	21 4	ND	272	16400	936	2850	1

SB-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	
5'	ND	ND	33 5	24 8	78 5	ND	8
10'	ND	ND	48 8	35 2	31 9	15	





	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
0'-2'	ND	ND	1040	5760	1220	169	369	6 2	–

MW-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	27	63	29	–	85	–	–

MW-10/BG-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
2'	40 4	ND	10400	13900	28400	517	40100	7 6	–
5 5'	2 8	ND	3800	2900	624	61 6	2840	8.3	–
10 5'	ND	0 73	40 7	49 3	30 2	ND	65 8	8.1	–

WMU46-B

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	ND	0 96	9570	23100	6230	1370	2170	7.5	–
2'-4'	ND	ND	18 6	1530	472	25 2	238	5 0	–
4'-6'	ND	1.27	7530	13300	11800	2180	2920	6 9	–

WMU46-SB3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	0 49	ND	55	2600	1400	14	240	3.6	–

WMU46-A

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
0 -2'	ND	ND	165	1340	508	172	262	7.9	–
2'-4'	ND	ND	19 6	1970	1560	93 0	389	5.2	–
4'-6'	ND	ND	32 7	49 4	429	ND	111	6 4	–

SB-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
5'	ND	ND	26 5	2900	905	238	360	2.6	ND
10.5'	ND	ND	47 4	704	405	14 7	171	3.5	ND

WMU33B

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
0'	1 7	ND	96 6	368	29 6	61 7	391	9 2	–
1.5'-2.5	7 2	ND	21	1770	38.6	10 4	1120	6.6	–

WMU46-HB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	ND	ND	37	39	31	13	57	7 1	–
5'-6'	0 43	ND	55	1000	380	17	220	4.8	–
9'-10'	ND	ND	72	410	150	21	120	5.7	–

WMU32

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	2 6	ND	428	1740	170	61 2	2300	7 4	–
3 -4'	1 4	ND	92	1330	74 2	15.3	616	7.3	–

WMU31

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	4 6	ND	29 6	161	37 2	27 3	313	7 1	–
3'-4'	1 6	ND	42 6	599	61 1	6 5	936	7 1	–

WMU46-D

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-1 6'	ND	6 0	1410	5970	380	18300	14600	6 9	–
3'	ND	ND	15 6	38 9	14 0	48 6	80	7.5	–
5'	ND	ND	22 0	666	228	9 0	161	6 1	–

WMU46-E

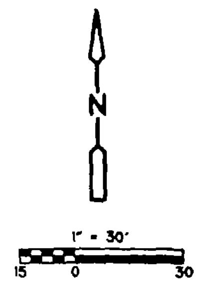
	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1.5'	16 6	[illegible]	775	[illegible]	[illegible]	[illegible]	[illegible]	6 9	–
3	19 2	[illegible]	[illegible]	[illegible]	362	[illegible]	[illegible]	6 9	–

LEGEND

- ○ DEEP SOIL BORING
- ● DEEP SLANT SOIL BORING (ARROW INDICATES DIRECTION)
- ● SURFACE AND SHALLOW SOIL BORING
- ⊟ KLEINFELDER DEEP SOIL BORING (ARROW INDICATES DIRECTION, IF SLANT BORING)
- ● MONITORING WELL
- ● SURFACE WATER SAMPLE

As	Arsenic
Cd	Cadmium
Cr+6	Chromium (Hexavalent)
Cr	Chromium (Total)
Cu	Copper
Ni	Nickel
Pb	Lead
Zn	Zinc
–	Not Analyzed
ND	Not Detected
bgs	Below ground surface

Note:
All metals results milligrams per kilogram(mg/kg), pH in units.



WMU46-SB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	0 38	ND	44	690	900	11	100	5 4	–

WMU46-HB2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	0 26	ND	44	130	290	11	80	7 0	–
5'-6'	0 32	ND	61	54	180	16	76	7.0	–
9'-10'	ND	ND	17	18	150	5 6	29	6.6	–

PL-HB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
.5'-1'	ND	ND	42 7	170	26 2	30	103	9 7	5.7
3'-4'	ND	ND	34	36 1	21 1	6 4	60 5	6 7	6 4
5'-6'	ND	ND	32 7	34 3	22 9	6 1	60	6 9	9

MW-11	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	1 2	–	16	2400	–	–	120	4 9	–

RS-5	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'	ND	ND	177	25 2	9 8	12 4	14 1	6.9	–
3'	ND	ND	64 0	61 5	25 8	696	89 5	6.6	–
5'	21 3	ND	383	278	95 5	226	360	8.8	–
10'	2 8	ND	155	138	58.3	194	378	8 6	–

RS-1	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'	ND	ND	138	20	58 9	ND	64.8	9.1	–
3'	5	ND	779	215	788	13 6	165	6.1	–
5'	1 4	ND	19 4	83	30 7	ND	150	7.4	–
10'	ND	ND	20 9	24 9	19.3	6	47 8	8 5	–

RS-6	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'	2 0	ND	279	1050	538	33 5	49 8	8 6	–
3'	1 7	ND	213	415	24 4	1590	300	8.4	–
5.5'	ND	ND	17 2	28 5	10.8	13 4	37 8	8.1	–
10'	ND	ND	27 5	20 2	13 5	ND	35 3	7 7	–

WMU22	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	1.5	ND	502	498	35 8	180	137	4 8	–

RS-2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'	1 9	ND	250	346	63 2	143	99 7	3.0	–
3'	1 0	0 77	221	774	65 7	41	104	3.5	–
5'	8 5	ND	38 2	206	383	118	2940	8.3	–
10'	ND	ND	33 5	118	59 1	11	225	4 8	–

MW-10	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
10'	–	–	31	89	28	–	100	8.3	–

PI-4	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'	2	ND	552	323	309	1090	672	7 9	–
2'	2 8	ND	28 4	82 5	41 7	1680	1170	8 2	–
6'	ND	ND	1870	17400	652	704	478	8 3	–
11'	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7 2	–

SB-7	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
3'	1 9	73 2	8030	6490	247	860	1010	7.5	16
5 5'	ND	1040	12000	448	12 9	180	27 1	4.2	ND
10 5'	ND	218	5540	2590	134	11 7	88.3	3 7	ND

WMU20-A/HB2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	4 7	ND	1190	770	96.2	113	316	7 6	–

B-5	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
5'	–	–	85	230	–	–	–	8.7	–
10'	–	–	30	76	28	–	79	8.3	–

WMU12-SB2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
3'	1 6	ND	450	37	17	68	190	8.9	–
5'	0 14	ND	94	22	20	8 4	56	7 9	–
10'	ND	ND	35	27	22	9 9	57	8.0	–

PI-7	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
0'	24 2	ND	2050	3390	498	4200	21100	9.4	–
5'	ND	ND	26 1	751	53 6	ND	113	9.0	–
10'	0 82	0 74	61 5	42 6	26 6	6 2	83 7	8.7	–

PI-2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
0'	2 9	15 6	2960	2110	205	81.3	130	10 1	–
1.5'	0.90	ND	1780	23 7	14 8	ND	40 3	8 2	–
4 5'	ND	ND	33 1	28 0	20 6	5 4	50 8	7.2	–
11'	ND	14 4	2960	1040	25 1	34 4	92 5	8 2	–

PI-3	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
5'	ND	143	8940	906	12 9	641	24 7	8.3	–
1 5'	ND	ND	1670	604	39 6	63 5	115	9 5	–
5	2 9	5 6	1380	1260	90 5	6 4	76 3	8.8	–
11 5'	ND	5 7	465	107	15 0	5 9	38 4	8 6	–

WMU20-B/HB1	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
1'-2'	4 4	1 4	244	428	218	541	287	7 4	–

B-4	Cd	Cr+6	Cr	Cu	Ni	Pb
5'	–	–	10000	480	–	–
10'	ND 82	–	16000	620	–	–

B-6	Cd	Cr+6	Cr	Cu	Ni	Pb
5'	–	–	3700	460	–	–

B-3	Cd	Cr+6	Cr	Cu	Ni	Pb
5'	–	–	420	1200	–	–

MW-2	Cd	Cr+6	Cr	Cu	Ni	Pb
10'	–	–	21	170	77	–

WMU12-SB1	Cd	Cr+6	Cr	Cu	Ni	Pb
3'	0 47	ND	68	25	16	13
5'	0 26	ND	40	23	21	9 9
10'	0 54	ND	71	72	50	20

UST-SB7	Cr	As
5.5'	22 1	4.8

SB-2	Cd	Cr+6	Cr	Cu	Ni	Pb
3'	40 8	28 4	1180	7560	1000	14800
5'	9 8	13 2	100	1480	248	1430
10'	21 4	ND	272	18400	938	2850

SB-3	Cd	Cr+6	Cr	Cu	Ni	Pb
5'	ND	ND	33 5	24 6	78 5	ND
10	ND	ND	48 6	35 2	31 9	15

B-4	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
5'	–	–	10000	480	–	–	–	4 6	–
10'	ND 62	–	16000	620	–	–	92	4.0	–

B-6	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
5'	–	–	3700	480	–	–	–	4.5	–

B-3	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
5'	–	–	420	1200	–	–	–	8.1	–

MW-2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
10	–	–	21	170	77	–	860	–	–

WMU12-SB1	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
3'	D 47	ND	88	25	16	13	140	8.9	–
5	D 26	ND	40	23	21	9 9	66	7.2	–
10	D 54	ND	71	72	50	20	100	8.9	–

UST-SB7	Cr	Ag
8.5'	22.1	4.9

SB-2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
1	40.9	29 4	1180	7560	1000	14800	10800	6.7	58
3	9 6	13 2	100	1480	248	1430	6880	6.6	ND
10'	21 4	ND	272	16400	836	2850	14900	6.8	ND

SB-3	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
5'	ND	ND	33 5	24 6	76 5	ND	6040	7.3	–
10'	ND	ND	46 6	35 2	31 9	15	120	7.5	–

CONTAINMENT CAPS

SB-1	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
12'	D 69	ND	39.6	159	37 7	164	711	7.2	–

WMU38-A	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
1 5'–2 5'	11 7	13	3020	4690	2410	258	2720	8.8	–
4'–5'	ND	ND	48 6	59 3	361	10 3	88 4	7.1	–

WMU24	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
1'–2'	2 6	ND	117	235	15 6	627	1630	7.5	–

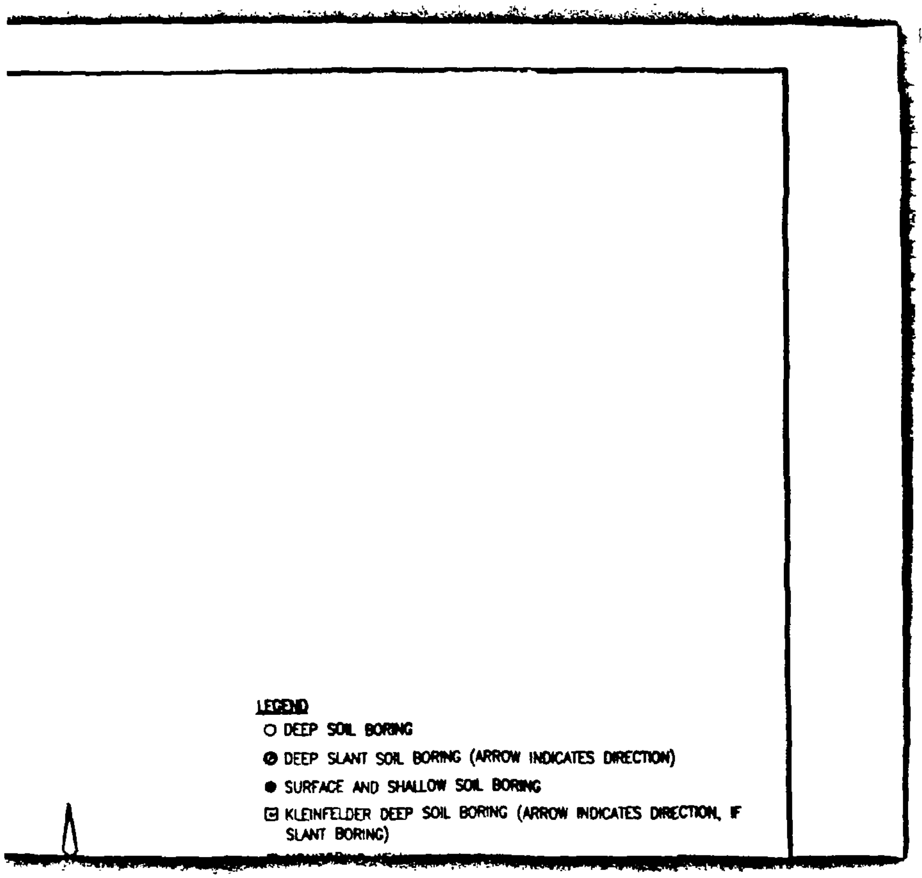
WMU42	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
1 5 –2 5'	0 64	ND	31 1	68 3	16 2	130	158	8.0	–
4 5'–5'	ND	ND	37 4	61 6	30 7	38 5	188	7.4	–

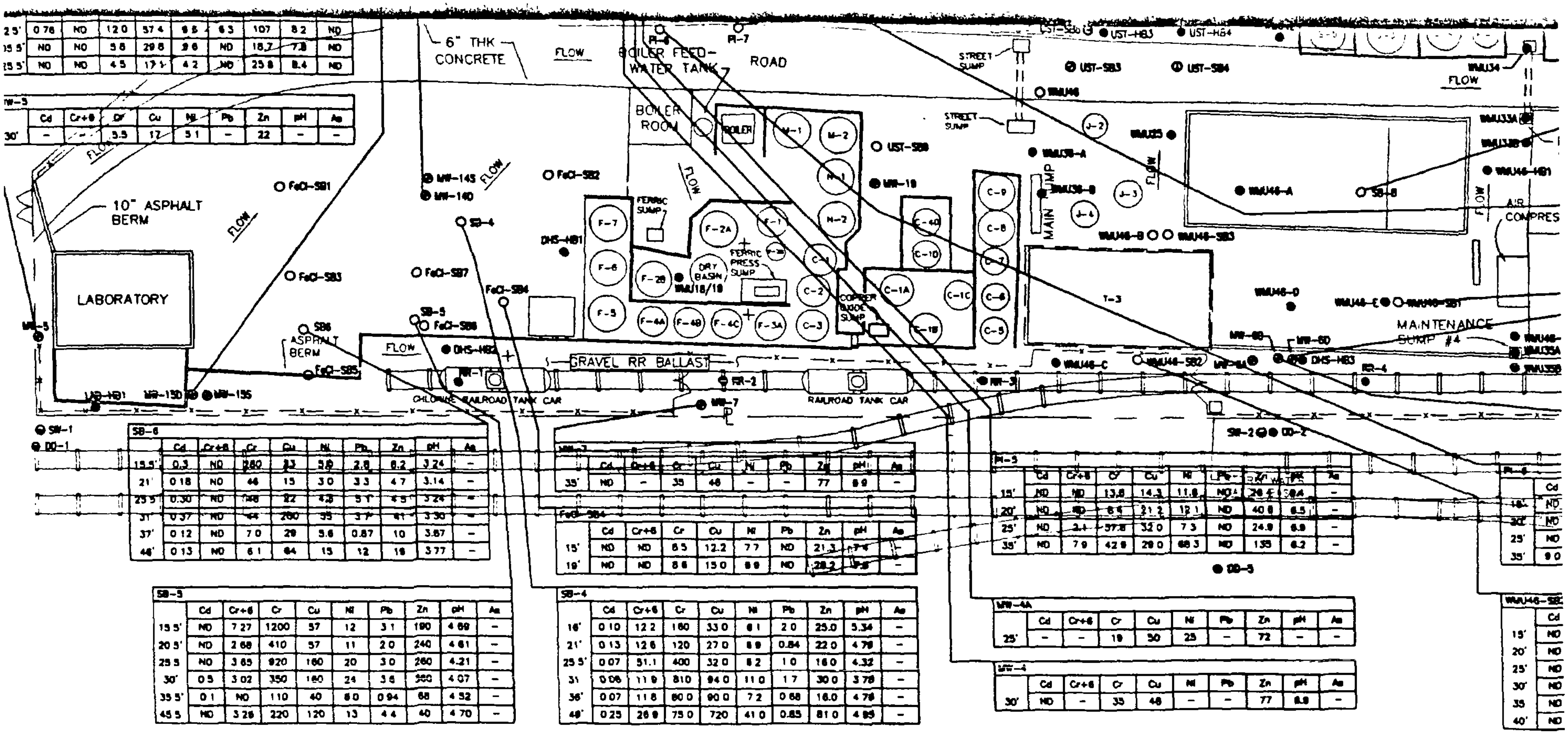
WMU25	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
0'–2'	ND	ND	1040	5760	1220	189	389	6.2	–

MW-1	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
10'	–	–	27	63	29	–	85	–	–

MW-10/BG-1	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
2'	40 4	ND	10400	13900	26400	517	40100	7.6	–
5 5'	2 6	ND	3800	2900	624	61 6	2840	8.3	–
10 5'	ND	D 73	40 7	49 3	30 2	ND	65 6	8.1	–

WMU46-B	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	Ag
1'–2'	ND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2170	7 5	–


LEGEND
DEEP SOIL BORING
DEEP SLANT SOIL BORING (ARROW INDICATES DIRECTION)
SURFACE AND SHALLOW SOIL BORING
KLEINFELDER DEEP SOIL BORING (ARROW INDICATES DIRECTION, IF SLANT BORING)



2 5'	0 76	ND	12 0	57 4	8 8	6 3	107	8 2	ND
15 5'	ND	ND	5 8	29 8	9 6	ND	18.7	7.8	ND
25 5'	ND	ND	4 5	17 1	4 2	ND	25 8	8.4	ND

MW-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	–	–	5.5	17	5 1	–	22	–	–

SB-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15.5'	0.3	ND	280	33	5.8	2.8	6.2	3 24	–
21'	0 18	ND	46	15	3 0	3 3	4 7	3.14	–
25 5'	0.30	ND	148	82	4.8	5 1	4 5	3 24	–
31'	0 37	ND	44	200	35	3 7	41	3 30	–
37'	0 12	ND	7 0	29	5.6	0.87	10	3.87	–
46'	0 13	ND	6 1	64	15	12	18	3 77	–

SB-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15 5'	ND	7 27	1200	57	12	3 1	190	4 69	–
20 5'	ND	2 68	410	57	11	2 0	240	4 61	–
25 5	ND	3 65	920	160	20	3 0	260	4.21	–
30'	0 5	3 02	350	160	24	3 6	360	4 07	–
35 5'	0 1	ND	110	40	8 0	0 94	68	4 52	–
45 5	ND	3 26	220	120	13	4 4	40	4 70	–

MW-7

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
35'	ND	–	35	46	–	–	77	8 9	–

FeCl-SB4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	8 5	12.2	7 7	ND	21.3	7 4	–
19'	ND	ND	8 6	15 0	8 8	ND	28.2	7.8	–

SB-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
16'	0 10	12 2	180	33 0	6 1	2 0	25.0	5.34	–
21'	0 13	12 6	120	27 0	8 9	0.84	22 0	4 78	–
25 5'	0 07	51.1	400	32 0	8 2	1 0	16 0	4.32	–
31	0 06	11 9	810	94 0	11 0	1 7	30 0	3 78	–
36'	0 07	11 8	80 0	90 0	7 2	0 68	16.0	4 78	–
48'	0 25	26 9	75 0	720	41 0	0.85	81 0	4 85	–

PI-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	13.8	14.3	11.8	ND	28 6	6.4	–
20'	ND	ND	6 6	21 2	12 1	ND	40 8	6.5	–
25'	ND	2.1	37.8	32 0	7 3	ND	24.9	6.9	–
35'	ND	7 9	42 8	29 0	68 3	ND	135	6.2	–

MW-4A

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	–	–	19	30	25	–	72	–	–

MW-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	ND	–	35	46	–	–	77	8.8	–

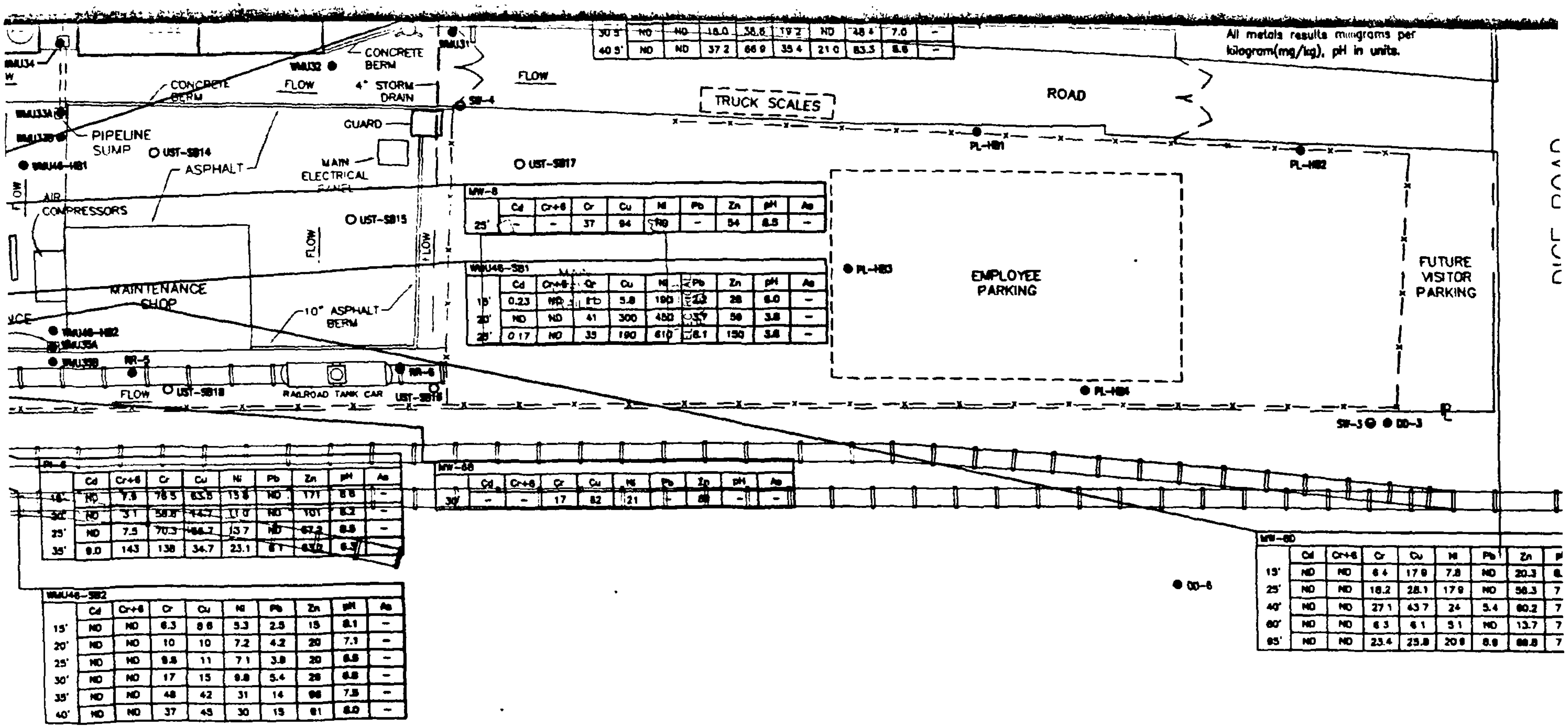
PI-6

	Cd
[illegible]	ND
30'	ND
25'	ND
35'	9 0

WMU46-SB2

	Cd
15'	ND
20'	ND
25'	ND
30'	ND
35	ND
40'	ND

CDM



	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30.5'	ND	ND	18.0	38.8	19.2	ND	48.4	7.0	–
40.5'	ND	ND	37.2	66.9	35.4	21.0	83.3	8.6	–

MW-8

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	–	–	37	94	ND	–	54	8.5	–

WMU46-SB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	0.23	ND	ND	5.8	190	2.2	28	6.0	–
20'	ND	ND	41	300	450	3.7	58	3.8	–
25'	0.17	ND	35	190	610	6.1	150	3.8	–

PL-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	7.8	78.5	63.5	13.8	ND	171	8.8	–
20'	ND	3.1	58.8	44.7	11.0	ND	101	8.2	–
25'	ND	7.5	70.3	66.7	13.7	ND	67.2	8.8	–
35'	9.0	143	138	34.7	23.1	8.1	63.2	6.5	[illegible]

MW-6B

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	–	–	17	82	21	–	69	–	–

MW-6D

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH
15'	ND	ND	6.4	17.9	7.8	ND	20.3	6.
25'	ND	ND	18.2	28.1	17.9	ND	58.3	7
40'	ND	ND	27.1	43.7	24	5.4	60.2	7
60'	ND	ND	6.3	6.1	5.1	ND	13.7	7
85'	ND	ND	23.4	25.8	20.9	8.8	68.8	7

WMU46-SB2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	6.3	8.6	5.3	2.5	15	8.1	–
20'	ND	ND	10	10	7.2	4.2	20	7.1	–
25'	ND	ND	9.8	11	7.1	3.8	20	6.5	–
30'	ND	ND	17	15	9.8	5.4	28	6.8	–
35'	ND	ND	48	42	31	14	96	7.5	–
40'	ND	ND	37	45	30	15	61	8.0	–

PHIBRO-TECH

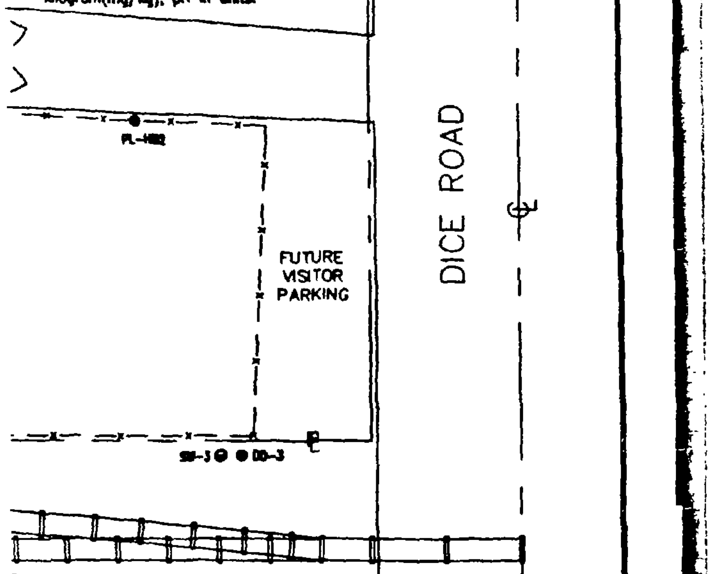
8851 DICE ROAD SANTA FE SP

Deep Sc

Metals and pH

(14 to 125.5 F

All metals results milligrams per kilogram(mg/kg), pH in units.



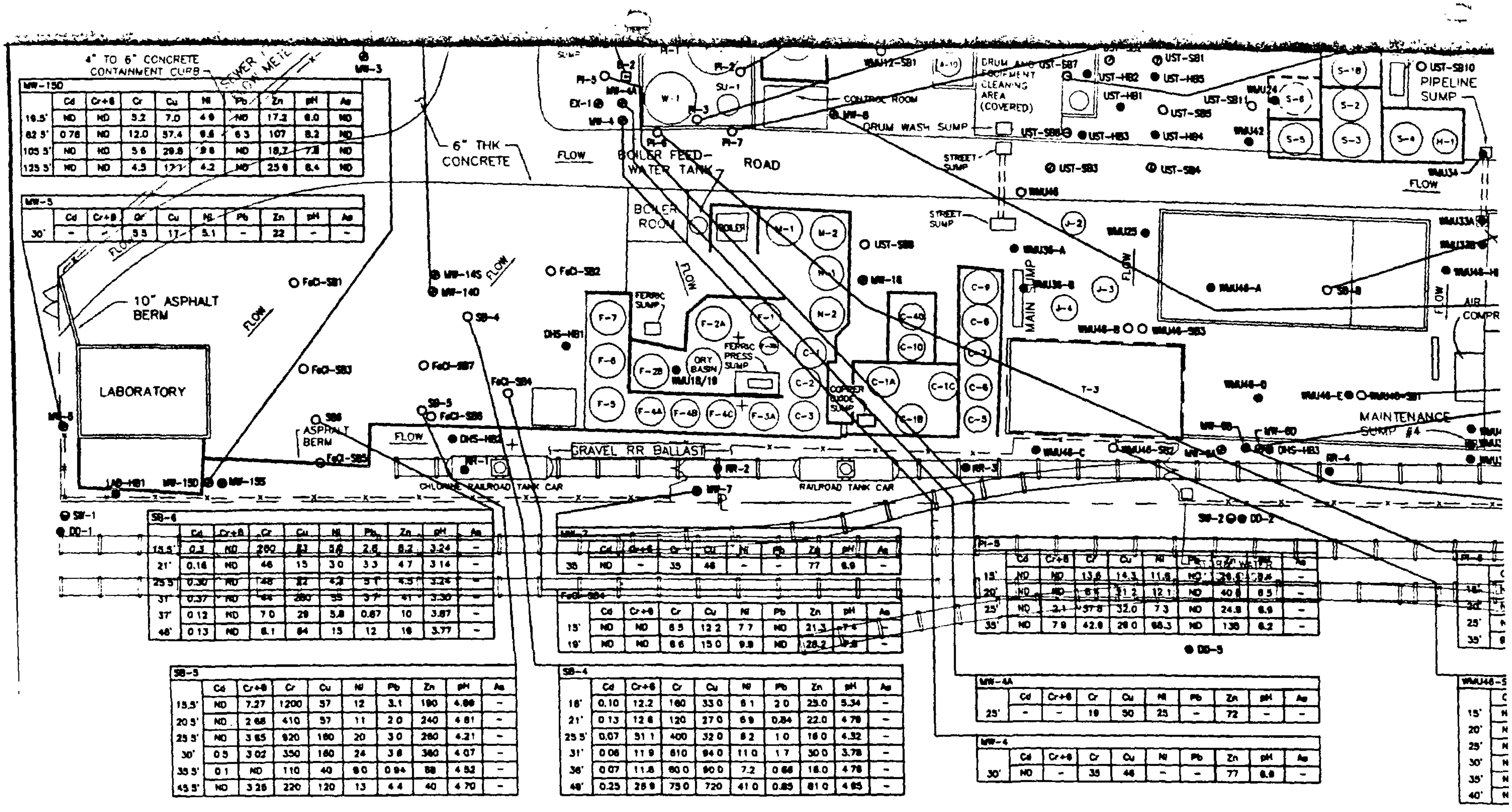
MW-6D

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	8.4	17.8	7.8	ND	20.3	8.2	–
25'	ND	ND	18.2	28.1	17.9	ND	58.3	7.4	–
40'	ND	ND	27.1	43.7	24	8.4	80.2	7.2	–
60'	ND	ND	6.3	6.1	5.1	ND	13.7	7.8	–
85'	ND	ND	23.4	25.8	20.9	6.9	88.8	7.8	–

PHIBRO-TECH, INC
8851 DICE ROAD SANTA FE SPRINGS CALIFORNIA

Deep Soil
Metals and pH Results
(14 to 125.5 Feet bgs)

Plate 7



MW-15D

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
19.5'	ND	ND	5.2	7.0	4.9	ND	17.2	6.0	ND
82.5'	0.76	ND	12.0	57.4	6.6	6.3	107	8.2	ND
105.5'	ND	ND	5.6	29.8	9.6	ND	18.7	7.8	ND
125.5'	ND	ND	4.5	17.7	4.2	ND	25.8	6.4	ND

MW-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	–	–	5.5	17	5.1	–	22	–	–

SB-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15.5'	0.3	ND	200	83	5.6	2.6	8.2	3.24	–
21'	0.16	ND	46	15	3.0	3.3	4.7	3.14	–
25.5'	0.30	ND	148	82	4.2	5.1	4.5	3.24	–
31'	0.37	ND	44	280	55	3.7	41	3.30	–
37'	0.12	ND	7.0	29	5.8	0.67	10	3.87	–
46'	0.13	ND	6.1	84	15	12	18	3.77	–

MW-7

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
35	ND	–	35	46	–	–	77	6.9	–

FeCl-SB4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	6.5	12.2	7.7	ND	21.3	7.6	–
19'	ND	ND	6.6	15.0	9.8	ND	28.2	[illegible]	–

SB-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15.5'	ND	7.27	1200	57	12	3.1	190	4.86	–
20.5'	ND	2.68	410	57	11	2.0	240	4.61	–
25.5'	ND	3.65	920	180	20	3.0	280	4.21	–
30'	0.5	3.02	350	160	24	3.8	380	4.07	–
35.5'	0.1	ND	110	40	8.0	0.94	88	4.52	–
45.5'	ND	3.26	220	120	13	4.4	40	4.70	–

SB-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
16'	0.10	12.2	160	33.0	8.1	2.0	25.0	5.34	–
21'	0.13	12.6	120	27.0	6.9	0.84	22.0	4.78	–
25.5'	0.07	51.1	400	32.0	8.2	1.0	16.0	4.32	–
31'	0.08	11.9	610	94.0	11.0	1.7	30.0	3.78	–
36'	0.07	11.8	60.0	90.0	7.2	0.66	18.0	4.78	–
46'	0.25	28.9	75.0	720	41.0	0.85	81.0	4.85	–

PI-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	13.6	14.3	11.6	ND	26.6	6.4	–
20'	ND	ND	6.6	31.2	12.1	ND	40.6	6.5	–
25'	ND	2.1	37.8	32.0	7.3	ND	24.8	6.9	–
35'	ND	7.9	42.8	28.0	66.3	ND	136	6.2	–

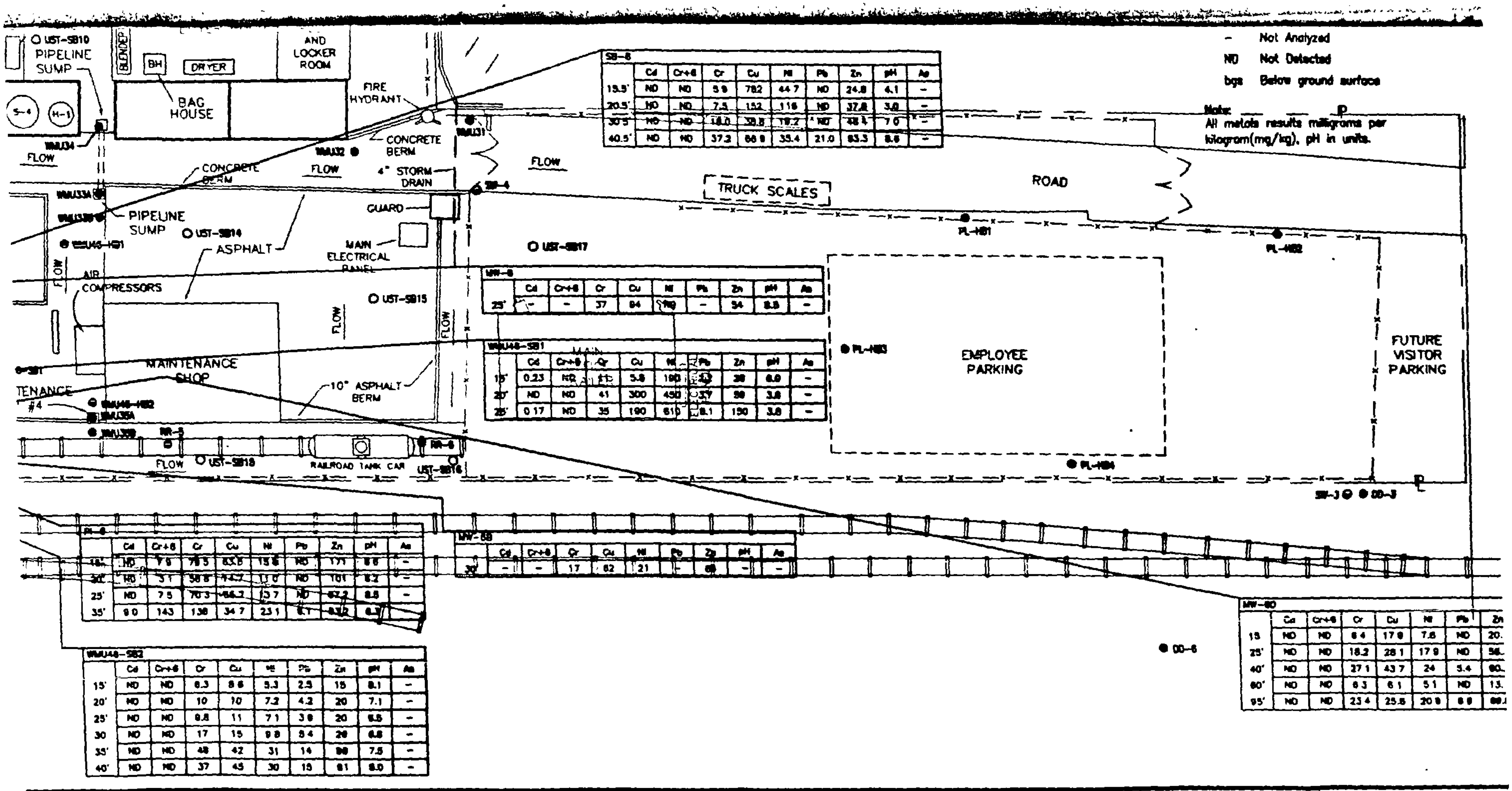
MW-4A

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	–	–	19	50	25	–	72	–	–

MW-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	ND	–	35	46	–	–	77	6.9	–

CDM



-	Not Analyzed
ND	Not Detected
bgs	Below ground surface

Note:
All metals results milligrams per kilogram(mg/kg), pH in units.

SB-8

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15.5'	ND	ND	5.9	782	44.7	ND	24.8	4.1	–
20.5'	ND	ND	7.5	152	116	ND	37.8	3.0	–
30.5'	ND	ND	18.0	39.8	19.2	ND	48.4	7.0	–
40.5'	ND	ND	37.2	66.9	35.4	21.0	83.3	8.6	–

MW-8

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	–	–	37	84	110	–	54	8.8	–

WMU46-SB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	0.23	ND	11	5.8	190	13	38	6.0	–
20'	ND	ND	41	300	450	37	98	3.8	–
25'	0.17	ND	35	190	610	8.1	150	3.8	–

PL-8

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	7.9	78.5	63.5	15.6	ND	171	8.6	–
20'	ND	3.1	58.8	44.7	13.0	ND	101	8.2	–
25'	ND	7.5	70.3	66.2	13.7	ND	67.2	8.8	–
35'	9.0	143	138	34.7	23.1	6.1	83.2	6.3	[illegible]

MW-58

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	–	–	17	62	21	–	68	–	–

WMU46-SB2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	6.3	8.6	5.3	2.5	15	8.1	–
20'	ND	ND	10	10	7.2	4.2	20	7.1	–
25'	ND	ND	9.8	11	7.1	3.9	20	6.5	–
30	ND	ND	17	15	9.8	5.4	28	6.8	–
35'	ND	ND	48	42	31	14	88	7.5	–
40'	ND	ND	37	45	30	15	81	8.0	–

MW-60

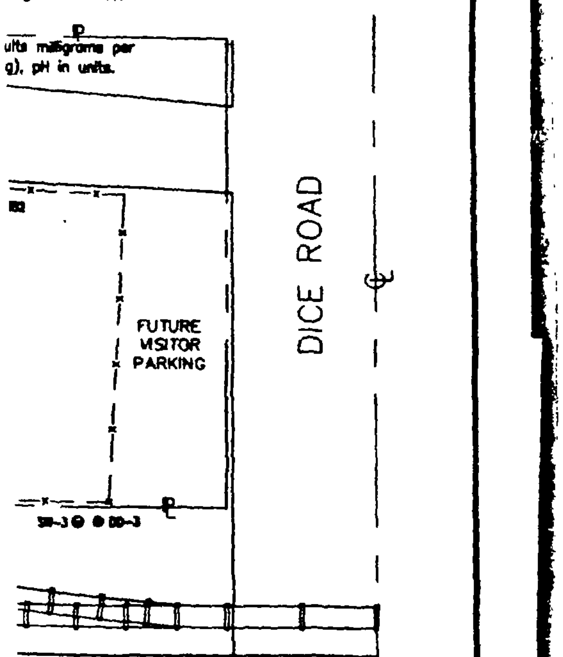
	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
15	ND	ND	6.4	17.9	7.6	ND	20.
25'	ND	ND	18.2	28.1	17.9	ND	56.
40'	ND	ND	27.1	43.7	24	5.4	60.
60'	ND	ND	6.3	6.1	5.1	ND	13.
95'	ND	ND	23.4	25.8	20.9	8.9	69.

Analyzed

Detected

w ground surface

ults milligrams per
g), pH in units.



Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
ND	8.4	17.9	7.8	ND	20.3	8.2	–
ND	18.2	28.1	17.9	ND	38.3	7.4	–
ND	27.1	43.7	24	5.4	80.2	7.2	–
ND	6.3	8.1	5.1	ND	13.7	7.8	–
ND	23.4	25.8	20.9	6.9	68.6	7.9	–

PHIBRO-TECH INC
8851 DICE ROAD SANTA FE SPRINGS CALIFORNIA

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	ND	ND	12.8	14.0	9.3	ND	28.9	7.5	–
40'	ND	ND	31.4	45.8	33.7	13.0	74.1	6.3	–

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	ND	ND	17.4	16.9	13.4	ND	38.8	7.4	–
40'	ND	ND	28.6	37.9	25.6	5.3	62.7	7.6	–

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
17'	ND	1.8	81.6	19.0	7.1	ND	22.4	8.3	3.3
21.5'	ND	61.2	238	24.7	8.5	ND	22.2	4.1	3.7
27'	ND	5.9	1420	68.0	17.6	ND	47.4	8.4	7.4
37'	ND	ND	225	251	119	7.8	109	3.6	16.2

B-2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	–	–	54	390	–	–	–	3.9	–
20'	–	–	440	230	–	–	–	3.8	–
35'	1.2	–	2000	250	–	–	120	3.3	–
40'	1.4	–	150	550	–	–	170	3.3	–

RS-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	8.8	ND	26.5	45.6	21.8	47.8	61.8	7.1	–
20'	ND	4.0	7.3	17.6	7.5	9.8	26.8	7.3	–
30'	ND	ND	6.3	11.6	5.2	8.5	19.7	7.2	–
40'	ND	7.4	31	47.1	32.1	18.8	61.0	7.0	–

RS-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	2.1	15.5	26.3	15.0	5.3	41.2	8.1	–
20'	ND	4.4	4.2	9.7	ND	ND	14.4	8.4	–
30'	ND	1.6	5.8	10.5	5.3	5.5	19.8	7.3	–
40'	ND	12.2	27.1	52.4	28.5	23.6	78.4	7.0	–

MW-14D

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	ND	24.5	268	39.9	4.9	ND	18.6	4.4	–
65'	ND	16.3	16.3	23.3	19.7	ND	58.6	6.8	–
110'	ND	0.30	133	68.6	18.0	ND	[illegible]	[illegible]	[illegible]

MW-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	–	–	4.2	19	ND	–	20	–	–

MW-150

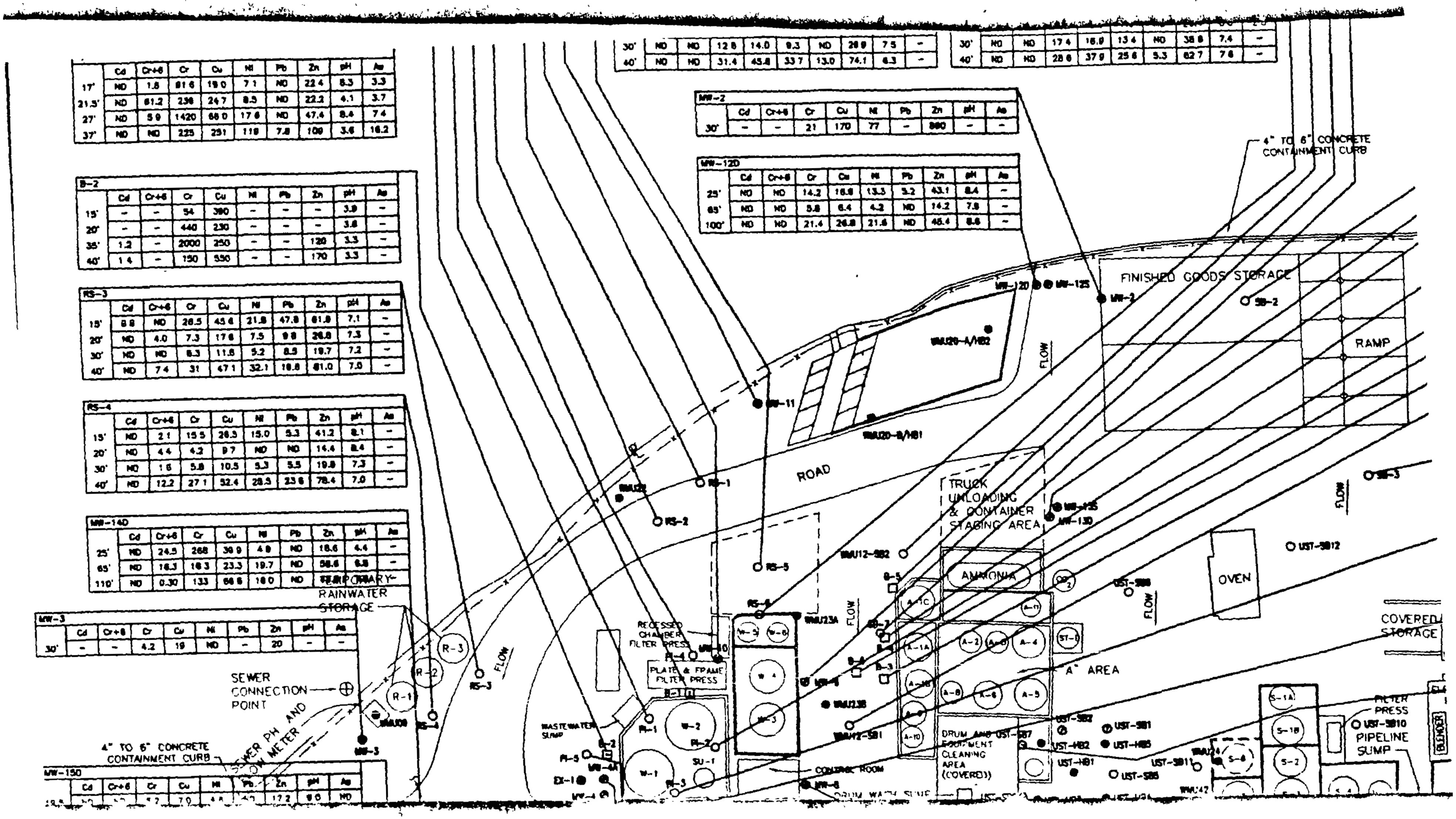
	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
[illegible]	[illegible]	[illegible]	5.2	7.0	4.8	[illegible]	17.2	8.0	ND

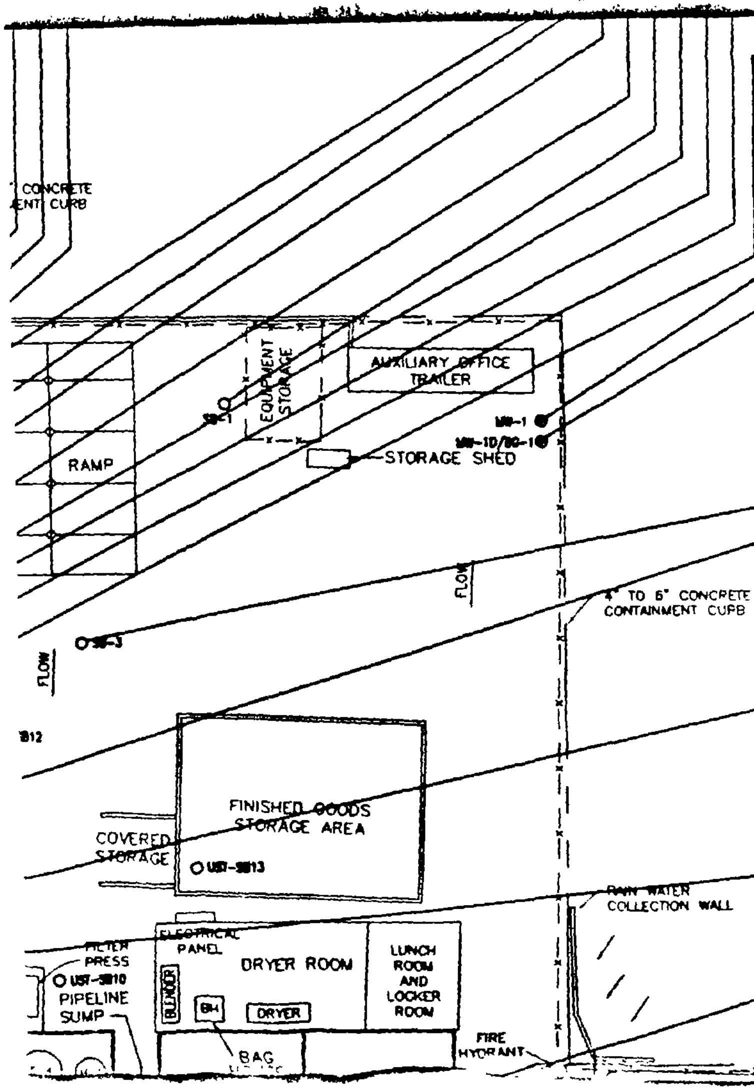
MW-2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	–	–	21	170	77	–	880	–	–

MW-12D

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	ND	ND	14.2	16.8	13.3	5.2	43.1	8.4	–
65'	ND	ND	5.8	6.4	4.2	ND	14.2	7.8	–
100'	ND	ND	21.4	26.8	21.6	ND	46.4	8.6	–





WMU12-SB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	32	27	17	6.8	57	7.3	–
20'	1.8	ND	11	7.1	7.5	2.5	23	7.8	–
30'	0.18	ND	34	31	23	9.4	68	6.8	–
40'	ND	ND	51	82	35	23	92	6.8	–

MW-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	–	–	17	38	18	–	62	–	–

MW-1D/BC-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15.5'	ND	ND	8.4	11.2	5	ND	13.9	8.1	–
20.5'	ND	ND	6.7	11.3	8.7	ND	20.5	8.0	–
25.5'	ND	ND	6.1	9.5	7.2	ND	17.6	7.7	–
30.5'	ND	ND	17.4	27.8	18.3	ND	50.5	7.7	–
40.5'	ND	ND	28.0	41.8	25.5	6.5	64.8	7.8	–
85.5'	ND	ND	28.4	48.6	27.4	6.2	64.8	8.1	–
87'	ND	ND	22.8	25.4	21.5	ND	50.5	8.3	–

SB-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15.5'	ND	ND	44.5	39.0	31.8	20.8	157	7.8	–
20'	ND	ND	7.8	8.5	16.7	ND	1480	8.3	–
30'	1.5	ND	20.3	31.5	49.0	8.0	4480	4.8	–
40'	ND	ND	22.1	28.1	20.5	8.2	88.0	7.8	–

PI-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
18'	ND	9.9	714	218	23.5	21.8	43.6	8.8	–
20.5'	ND	4.4	274	98.4	12.8	ND	27.8	8.7	–
25.5'	ND	17.1	218	84.3	10.8	ND	24.8	8.2	–
35.5'	ND	1.5	124	408	72.4	ND	120	3.7	–

PI-7

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	10.4	867	88.4	6.9	ND	24.8	4.8	–
20'	ND	8.9	429	50.1	8.7	ND	26.0	4.4	–
25	ND	7.4	462	33.8	4.4	ND	13.8	4.6	–
35'	ND	81.6	720	409	70.4	5.8	108	3.4	–

UST-SB7

	As
17'	4.1
40.5'	18

SB-8

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15.5'	ND	ND	5.9	782	44.7	ND	24.8	4.1	–
20.5	ND	ND	7.5	152	118	ND	37.8	3.0	–

1" = 30'

15 0 30

N

LEGEND

- DEEP SOIL BORING
- DEEP SLANT SOIL BORING (ARROW INDICAT
- SURFACE AND SHALLOW SOIL BORING
- KLEINFELDER DEEP SOIL BORING (ARROW I SLANT BORING)
- MONITORING WELL
- SURFACE WATER SAMPLE

As	Arsenic
Cd	Cadmium
Cr+6	Chromium (Hexavalent)
Cr	Chromium (Total)
Cu	Copper
Ni	Nickel
Pb	Lead
Zn	Zinc
–	Not Analyzed
ND	Not Detected
bgs	Below ground surface

Note:

All metals results milligrams per

RS-2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	3 1	ND	13 4	17.7	30.8	5.0	299	7.1	–
20'	1.0	ND	5.8	8.0	7.7	ND	65.2	6.8	–
30'	0.60	ND	5.2	6 6	7.1	ND	75.3	5.8	–
40'	ND	ND	32 6	48.7	32.8	15.2	81.0	8.7	–

PI-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
17'	ND	ND	13.3	22.2	12.3	ND	35	7.3	–
21.5'	ND	ND	6.3	11.3	5.1	ND	18	7.0	–
26.5'	ND	ND	25.8	10 4	18 6	ND	26.1	8.7	–
36'	ND	ND	30.0	94.0	13.8	15.4	36.8	7.5	–

B-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	–	–	13	130	–	–	–	7.0	–
40'	1.5	–	600	400	–	–	180	3.8	–
50'	6.0	–	280	160	–	–	85	5.5	–

PI-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
17'	ND	1.8	91.8	19.0	7.1	ND	22.4	8.3	3.3
21 5'	ND	61.2	239	24 7	8.5	ND	22.2	4.1	3.7
27'	ND	5.9	1420	66 0	17.6	ND	47.4	8.4	7.4
37'	ND	ND	225	251	119	7 6	109	3.6	19.2

RS-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	14 9	19.4	14 0	ND	37 9	8.2	–
20'	ND	ND	4.6	6.3	4.1	ND	14.4	8.4	–
30'	ND	ND	6.5	8.4	5.8	ND	16.7	8.2	–
40'	ND	1.2	28.4	38.2	24.3	5.7	61.9	8.7	–

MW-10

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	–	–	5.3	25	6.4	–	30	7.3	–

MW-11

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
35'	3.0	–	18	40	–	–	68	8 2	–

RS-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	20 1	22.1	17.3	ND	40 4	7 6	–
20'	ND	ND	8.1	9.3	7.7	ND	20	6.9	–
30'	ND	ND	12.8	14 0	9.3	ND	28.9	7.5	–
40'	ND	ND	31.4	45.8	33 7	13.0	74.1	8.3	–

MW-2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
30'	–	–	21	170	77	–	860	–	–

MW-9

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
15'	–	–	15	28	19	–	55
25'	–	–	4.3	18	4.8	–	29

B-5

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
15'	–	–	3200	12000	–	–	–
25'	–	–	49	160	12	–	34

WMU12-SB2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
15'	ND	ND	30	21	16	8.2	50
20'	ND	ND	18	8.5	7.4	4.4	34
30'	ND	ND	11	3 5	4 5	2.5	21
40'	ND	ND	41	35	29	9.7	76

RS-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
15'	ND	ND	13.3	16.1	12.3	ND	29.8
20'	ND	ND	7.9	15 0	7.6	ND	20.4
30'	ND	ND	17.4	16.9	13 4	ND	38.8
40'	ND	ND	28.6	37 9	25.6	5.3	62.7

MW-9	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	–	–	15	28	19	–	55	6.9	–
25'	–	–	4.3	18	4.6	–	29	7.4	–

B-5	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	–	–	3200	12000	–	–	–	4.8	–
25'	–	–	48	160	12	–	34	4.5	–

WMU12-SB2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	30	21	18	8.2	80	7.8	–
20'	ND	ND	18	6.5	7.4	4.4	34	7.8	–
30'	ND	ND	11	3.5	4.5	2.5	21	7.3	–
40'	ND	ND	41	35	29	9.7	76	6.5	–

RS-6	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	13.3	16.1	12.3	ND	29.8	7.8	–
20'	ND	ND	7.9	15.0	7.6	ND	20.4	8.0	2.8
30'	ND	ND	17.4	18.9	13.4	ND	38.8	7.4	–
40'	ND	ND	28.6	37.9	25.6	5.3	82.7	7.6	–

Zn	pH	As
[illegible]	–	–

MW-13D	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	ND	ND	6.6	8.2	8.7	ND	21.9	8.1	–
65'	ND	0.74	94.4	33.9	14.5	ND	47.7	10.2	–
95'	ND	ND	20.0	29.9	19.4	ND	50.5	8.3	–

SB-7	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15.5'	ND	312	2200	2470	47.0	ND	62.6	3.9	ND
20.5'	ND	906	7130	1400	45.4	ND	45.8	3.9	ND
30.5'	ND	330	2700	1650	74.2	11.6	75.2	3.3	ND
40.5'	6.4	1160	979	85.6	25.7	7.1	60.3	6.5	31/ND*

*40'/40.5'

SB-2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	22.7	31.4	20.8	6.0	52.7	7.7	6.8
20.5'	ND	ND	9.0	11.2	6.9	8.2	30.9	7.6	ND
30'	ND	ND	20.0	29.3	19.6	ND	54.7	5.0	ND
40.5'	ND	ND	34.4	44.2	31.6	12.5	81.1	7.2	ND

B-4	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
25'	ND	–	550	1200	–	–	52

PI-2	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
18.5'	ND	24.4	755	52.5	10.2	ND	29.1
23'	ND	30.9	600	33.4	5.4	ND	13.6
32'	1.2	199	2190	299	34.2	ND	75.3
36.5'	2.5	ND	50.2	59.4	35.2	10.4	77.7

B-6	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
15'	–	–	5100	4100	240	–	430
25'	–	–	1500	1400	98	–	43

B-3	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
15'	ND	–	11	31	–	–	57

WMU12-SB1	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn
15'	ND	ND	32	27	17	8.9	57
20'	1.6	ND	11	7.1	7.5	2.5	23
30'	0.19	ND	34	31	23	8.4	66
40'	ND	ND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

4" TO 6" CONCRETE

+6	Cr	Cu	Ni	Pb	Zn	pH	As
ND	6.6	8.2	6.7	ND	21.9	8.1	–
74	94.4	33.9	14.5	ND	47.7	10.2	–
ND	20.0	29.9	19.4	ND	50.5	8.3	–

+6	Cr	Cu	Ni	Pb	Zn	pH	As
12	2200	2470	47.0	ND	62.8	3.9	ND
06	7130	1400	45.4	ND	45.8	3.9	ND
30	2700	1650	74.2	11.6	75.2	3.3	ND
60	878	65.6	25.7	7.1	60.3	6.5	31/ND*

*40'/40.5'

+6	Cr	Cu	Ni	Pb	Zn	pH	As
D	22.7	31.4	20.8	6.0	52.7	7.7	8.8
D	9.0	11.2	6.9	6.2	30.9	7.6	ND
D	20.0	29.3	19.6	ND	54.7	5.0	ND
D	34.4	44.2	31.6	12.5	81.1	7.2	ND

B-4

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
25'	ND	–	550	1200	–	–	52	4.2	–

PI-2

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
16.5'	ND	24.4	755	52.5	10.2	ND	29.1	4.2	–
23'	ND	30.9	600	33.4	5.4	ND	13.6	4.3	–
32'	1.2	199	2190	299	34.2	ND	75.3	3.2	–
36.5'	2.5	ND	50.2	59.4	35.2	10.4	77.7	5.9	–

SB-1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	23.0	37.9	21.6	5.7	83.6	7.5	–
20.5'	ND	ND	7.3	9.8	5.9	ND	18.7	7.9	–
30.5'	ND	ND	17.1	23.7	16.7	5.5	46.1	7.5	–
40'	ND	ND	24.6	41.2	23.3	10.8	65.4	8.4	–

B-6

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	–	–	5100	4100	240	–	430	3.6	–
25'	–	–	1500	1400	98	–	43	4.2	–

B-3

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	–	11	31	–	–	57	6.3	–

WMU12-SB1

	Cd	Cr+6	Cr	Cu	Ni	Pb	Zn	pH	As
15'	ND	ND	32	27	17	8.9	57	7.3	–
20'	1.6	ND	11	7.1	7.5	2.5	23	7.5	–
30'	0.19	ND	34	31	23	8.4	66	6.8	–
40'	ND	ND	51	62	35	23	82	6.9	–